

**A STUDY TO ASSESS THE EFFECTIVENESS OF AROMA
THERAPY ON DEPRESSION AMONG OLD AGE PEOPLE,
AT SELECTED OLD AGE HOME, DINDIGUL**



REGISTER NUMBER: 301432851

**A DISSERTATION SUBMITTED TO THE TAMILNADU
Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN
PARTIAL FULFILLMENT FOR THE DEGREE OF MASTER
OF SCIENCE IN NURSING**

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INTERNAL EXAMINER

EXTERNAL EXAMINER

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CERTIFICATE

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ABSTRACT

INTRODUCTION

Old age is not so full of energy, but things are settling and depth is arising. If you miss your youth, you will miss your old age. Aromatherapy is a form of alternative medicine that uses plant materials and aromatic plant oils, including essential oils, and other aromatic compounds for the purpose of altering one's mood, cognitive, psychological or physical wellbeing.

OBJECTIVES:

- To determine the pre test and post test level of depression among old age people in the experimental and control group.
- To determine the effectiveness of aroma therapy on depression among old age in experimental group.
- To associate the post level of depression with the selected demographic variables of old age people in the experimental group and control group.

HYPOTHESIS

- The mean post test depression score of the old age will be significantly lesser than the mean pre test depression score of the old age who will have aroma.
- There will be a significant association between the post test depression level of the old age and their selected demographic variables.

METHODOLOGY

Quantitative evaluative research approach, quasi experimental design was used for this study. Purposive sampling technique was used for the study.

FINAL RESULT AND CONCLUSION

In the pre test the level of depression Among the experimental group (40%) had mild depression (60%) moderate level of depression . But in the post test majority of the samples experienced much mild level of

depression(63%), (37%)had moderate level of depression.. The effectiveness of aromatherapy on depression among old age using paired “t” test shows 10.5 significant at the level of $P < 0.001$ Which implying that there was significant decrease in the level of depression in the post test .

INTRODUCTION



CHAPTER-1

INTRODUCTION

“Aging is not lost youth but a new stage of opportunity and strength”

- James Thurber

BACK GROUND OF THE STUDY

Old age is not so full of energy, but things are settling and depth is arising. If you miss your youth, you will miss your old age.

Home is the first school. Parents and grandparents are the first teachers. Grandparents are the one who teaches customs, culture, norms. As they have gone through different phases of life, they can guide younger generation in needed situation helps to lead a healthier life. In olden days the joint family system was more common, people were living in joint families, usually the male member was the head of the family and he made all important decisions and rules, where as other family members abide by it dutifully with full respect. **(Stanly 2006)**

New generation have less attachment with their elderly people as modern families are disintegrating into nuclear family. When they are getting responsibility to take care of their elders, they refuse to do because they want to enjoy their life without them, changing value system, reducing concern towards elderly people. Thus new generation thinks elderly people as burden of their life and they send them to old age home. These include loss of autonomy & selfesteem, insomnia, sense of restlessness, loneliness, hopelessness and helplessness. Depression is common among the elderly as they stay in the old age homes for a longer period. **(Kiangsi et.al, (2008)**

“Prevention is better than cure”, and same applies for depression prevention. People who have suffered from depression before, at first time they will be able to notice that their mood is going down. Such people should immediately try and beat depression by ensuring certain basic life style. Some important ways to deal with depression includes sticking to balance diet, proper exercise, adequate sleep, relaxation, thinking positively, keeping oneself occupied and engaged as much as

possible in recreational activity like listening music, watching TV, performing in all activities. (**Racine 2005**)

Aromatherapy is a form of alternative medicine that uses plant materials and aromatic plant oils, including essential oils, and other aromatic compounds for the purpose of altering one's mood, cognitive, psychological or physical wellbeing. (Merriam)

The intention of the study is to assess whether green environment and activity related to plants have an effect on depression among elderly living in long term care.

Throughout the world the number of older people is increasing rapidly, especially the oldest. According to The world Health Organization, the world's elderly population age 60 years and older as of 2011 was 650 million people in Tamilnadu (Official Statistics 2011)

Baldwin et al, (2011) conducted a study on depression is a serious condition for people of all ages, but for older people depression is often associated with other co-morbid conditions, such as physical disability that exacerbate the distress experienced by older people and their careers. . The samples were selected quasi experimental design. .60 samples selected. The prevalence of depression was 33.9%for men and 40.5% for women. The result found that the elderly people require an institutional treatment is more in old age homes (27.80%).

Tse et al, (2012) conducted study to assess the effectiveness of aroma therapy on depression among old age . The samples were selected in non equivalent control group pre-test and post test method. The findings reveals that the prevalence rate of elderly depression in the world is 10.3% and 21.9% among the elderly Indian population. It shows that geriatric depression was higher among the Indians than the rest of the world. The results revealed that aroma therapy improved mind and reduce the depression of the elderly.

NEED FOR THE STUDY

The outlook of our society to the elderly population is as if they are a burden. This attitude has to be changed. Elders are assets to any society. The contributions of elderly people; our senior citizens to the society is indispensable. Their rich experience, invaluable ideas, free guidance is much deserving assets of nation. They share all these with their younger generation without any hesitation. The elderly population has increased, their problems are also increasing and depression has become a major problem. Depression is among the most treatable of psychiatric illnesses. More than 80 percent of those who actually seek treatment for major depression experience significant improvement and almost all individuals derive some benefit from medical care. Depression, if untreated, may lead to suicide. People with untreated severe depression have a suicide rate of about 15 percent. 20% of all suicides occur on the elderly over 65 years of age. The numbers are expected to increase as more people get older. The main reason for suicides is depression. **(wilensky 2008)** According to a Professor of Psychology, major depression affects about 3% of the elderly- 7% of the elderly have minor depression. **(Septoe2010)**

Depression is a common condition in older people affecting about 17-30% of community dwellers over the age of 65 years. Nearly a third of older people admitted for acute hospital care experienced depression. Rates of depression are even higher in care homes. Depressive disorders are common among old people in old age homes. Outside India the prevalence rate for depressive symptoms in homes ranges from 30-75% while that for depressive disorders defined by psychiatric diagnostic criteria is well over 20% in many old age home studies. These rates are between two and twenty times higher than those found among the elderly living at home.

In India World Health Organization estimated a prevalence of depression to be 1.9% among men and 3.2% among women. The sex differences indicate higher rates among with a ratio of 2:1. Studies from northern India reveal that the combined rates vary from 1.3 to 4.7, while rural and urban rates vary from 1.5 to 13, and 1.9 to 6.1/1000, respectively. The southern region reports rural rates of 0.5–3 and an urban rate of 20. The eastern parts of India report the highest rate.**(Rorsman 2010)**

According to the survey conducted by Tamilnadu (2010). Depression was assessed according to the geriatric depression scale. The prevalence of depression was

34.9% for men and 41.9% for women. The result found that the elderly people require an institutional treatment is more in old age homes (25.71%).

Majority of the old age in India under study had experienced depression was assessed according to the Hamilton Rating Scale for Depression, The prevalence of depression was 35% , for the total population 41% , for those living at home 29%. Not being able to work actively, poor religious interest, widowhood, alcohol consumption, older age and physical disability were significantly correlated with the prevalence of depression. **(Benya 2008)**

India, with 1,270,272,105 (1.27 billion) people is the second most populous country in the world, while China is on the top with over 1,360,044,605 (1.36 billion) people. India represents almost 17.31% of the world's population, which means one out of six people on this planet live in India. With the population growth rate at 1.58%, More than 50% of India's current population is below the age of 25 and over 65% below the age of 35. **(pierce 2010)**

Tamil Nadu current population 72, 138,958. 55-64 years: 6.8% (male 41,035, 270/females 40,449,880) 65 years and over: 5.6% (male 31, 892, 823/ female 35,225,003). Depression is not a normal part of aging. However, "more than 2 million of the 34 million Indians age 65 and older suffer from some form of depression". **(Paul)**

There is an urgent need for studies which will better define likely etiological and maintaining factors for depression in old age populations, as well as controlled trials of both pharmacological treatments and environmental improvements. In addition, research is needed to establish whether depression is an independent risk factor for mortality among old age homes. Various studies had been conducted among old age people to assess depression in that major studies shows that women is having more depression and other shows that men is having more depression. This variation in result forced the investigator to conduct a research at Dindigul to compare and publish the level of depression among old age homes elderly.

STATEMENT OF THE PROBLEM

“A Study to Assess the Effectiveness of Aroma Therapy on Depression among old age people at Selected Old Age Home Dindigul”.

OBJECTIVES OF THE STUDY

- To determine the pre-test and post test level of depression among old age people the experimental and control group, at selected old age home
- To determine the effectiveness of aroma therapy on depression among old age people in experimental group.
- To associate the post level of depression with the selected demographic variables of old age in the experimental and control group.

HYPOTHESIS

H₁: The mean post test depression score of the old age will be significantly lesser than the mean pre-test depression score of the old age who will have aroma.

H₂: There will be a significant association between the post test depression level of the old age and their selected demographic variables. (Age, sex, Marital status, Religion, Domicile, support system, Duration of stay in old age home, Performance of activities in daily living, Nature of admission, Education.)

OPERATIONAL DEFINITIONS

EFFECTIVENESS

It refers to, the extent to which aromatherapy decreases the level of depression among old age as evidenced by decrease in the post test score which is measured by geriatric depression scale.

AROMA THERAPY

In this study, It refers to the mixing of the five drops of lavender oil in 10ml of gingili oil for massaging from head to shoulder. Massage is given for 20mts with bare hands using techniques like stroking, combing, scratching, tapping, pulling. The therapy is given twice weekly for a period of four weeks.

DEPRESSION

It's the hopelessness, depressed mood, loss of interest in daily activity evidenced by impaired social and occupational functioning assessed using Geriatric Depression Scale.

OLD AGE

It refers to the people above 50 years of age.

OLD AGE HOME

It refers to a shelter made especially for old age people to stay and continue their life, providing food, clothes and taking care of elders.

ASSUMPTIONS

- Depression is increasingly prevailing among old age at old age homes.
- Aroma therapy may have high impact on depression.

DELIMITATIONS

The study is delimited to,

- The old age people above 50 years of the age
- Living in old age homes in Dindigul
- Willing to participate in the study
- Available during data collection

PROJECTED OUTCOME

- The study would enable to identify the level of depression in old age.
- The results of the study would help to assess the effectiveness of aroma therapy on depression among old age.

REVIEW OF LITERATURE



CHAPTER II

REVIEW OF LITERATURE

Researcher almost never conducts a study in an intellectual vacuum. Their studies are undertaken within the content of an existing base of knowledge. Researchers generally, undertake a literature review and familiarize them about the topic under study (Polite and Humbler, 2004)

The review of literature was done from published from published articles, textbook, reports and Medline search. Literature review is organized and presented under the following headings.

Review of literature in this chapter is discussed under the following headings:

SECTION I: Review related to among old age depression.

SECTION II: Review related to effectiveness of aroma therapy

SECTION III: Review related to effectiveness of aroma therapy on depression.

SECTION I: REVIEW RELATED TO AMONG OLD AGE DEPRESSION

Tavakoli, et.al, (2012) conducted a study on “depression in an elderly population”. The purpose of the study was to explore the depression among public old age homes and own home. The prevalence of depression was investigated in 2 groups of elderly people in living in a public old people's home and in their own home. Depression was assessed according to the Hamilton Rating Scale for Depression, The prevalence of depression was 35% for the total population, 41% for those living in an old age home and 29% for those living at home. The reported prevalence of depression among public old age home, and own home which depression reported that it limited their activities.

Berensons, et.al (2011) conducted a cross- sectional study on “depression among elderly men and women living in old age homes” in, Gujarat. Depression was assessed according to the geriatric depression scale. The prevalence of depression was

34.9%for men and 41.9% for women. The result found that the elderly people require an institutional treatment is more in old age homes

Asbahr, et.al, (2010) conducted a study on to “assess effects of unipolar depression on cognitive performance” in a population-based sample of elderly persons .The purpose of the study was to explore the prevalence of depression in older populations.. The reported prevalence of depression in older populations, the impact of this disorder on cognitive functioning may be relatively large at the population level.

Michigan, et.al (2009) conducted a cross sectional study on “To determine the prevalence of depression and its associated factors among elderly .The purpose of the study was to explore the prevalence of depression among old age in an urban area . A 30-item Geriatric Depression Scale questionnaire was used as the main screening instrument.. The results showed that 6.3% of the elderly respondents were found to have depression. cognitive impairment were found to be significantly associated with depression among the elderly respondents. The prevalence of depression among the elderly respondents in this study was 6.3%.

Lai H.L. and Good M. (2010) conducted a cohort study on “duration and severity of depression predict mortality in older adults in the community”. A sample of 325 subjects above 60 years were selected and diagnosed based on centre for Epidemiological Studies Depressed Scale. The findings revealed that effect on mortality is related to severity of depression.

Haussler, et, al (2011) conducted a quasi experimental study on’’ reminiscence therapy for older women with depression’’.. Mini mental state examination was used as a screening instrument to determine levels of cognitive impairment. The experimental group received reminiscence therapy. The results revealed that reminiscence therapy was an effective treatment for reducing depression among old age.

Wu I-M, Sheen J.M, et.al, (2012) conducted a study on “examine the temporal relation between depression and cognitive impairment in old age.The study concluded that should be aware of the development of depressive symptoms when

cognitive impairment is present. However, the presence of depression only does not increase the risk of cognitive decline.

An J Y (2011) conducted study to identify depressive symptoms and related risk factors in old and oldest, old elderly people with arthritis. Results found that the prevalence of depressive symptoms was greater for old people 66.7% compared to old people 56%. These findings show that there are age differences in depression and related factors in elderly people with arthritis.

Anker Barona (2008) assessed the distribution of depressive disorders in elderly in the continent of south India as community based mental health survey. The findings reveal that the prevalence rate of elderly depression in the world is 10.3% and 21.9% among the elderly Indian population. It shows that geriatric depression was higher among the Indians than the rest of the world.

Ritchie K (2008) Conducted a study to assess the prevalence of depression among the elderly population. Results indicated that 26.5% has major depression and 3.7% made in suicidal attempt.

Raj Kumar A.P (2009) Identified the nature prevalence and factors related to depression among the elderly south Indian rural community in Vellore. The tools used are Geriatric mental state for dementia, modified. Major depression is significantly related with hunger, diabetes, past head injury, and more disability. They concluded that poverty and physical illness are risk factors for depression.

SECTION II: REVIEW RELATED TO EFFECTIVENESS OF AROMA THERAPY

Young Chang (2009) conducted a study to examine the effect of aroma therapy massage on sleep, depression. Divided into two groups. Experimental and control group. Massage was given on each hand for 5mts. three times a week. Results indicated that aroma hand massage showed more significant differences in the change of sleep score reduce depression.

Seo J Y (2010) examined the effect of aroma therapy on stress and stress responses in adolescents cross over design. Bergamot oil inhalation was given for the

experimental group. They concluded that stress levels were significantly lower in the aroma treatment.

Kyle (2009) conducted a study to compare the effectiveness of massage with 1% sandalwood oil to reduce anxiety. The findings revealed that the aroma therapy massage and diffusion of sandalwood oil showed steady and sustained in reduce the anxiety level.

Lee I.S and Lee G.J (2008) conducted a study to show the effect of lavender aroma therapy on depression in women's college students sample were studied during a 4 week protocol of varying concentration of lavender fragrance. The results showed that higher concentration of lavender oil treatment decreases the length of time taken to fall asleep and severity of insomnia, to reduce the sleep disturbances and reduce the depressive level.

Research Institute of Nursing Science (2009) Aroma therapy massage as on elderly people reduce the level of depression aromatic essential oil like lavender. Overall the study seven weeks in duration. The results of aroma therapy to reduce the depression level and self esteem.

Mozzarella ,Force and sebold (2010) conducted a study assess the effectiveness of aroma therapy on reduce anxiety among old age. The samples were selected by convenient sampling method. They identified no significant difference in anxiety before and after lavender inhalation. Suggesting that aroma therapy may be better for moderate anxiety than for severe anxiety.

Lehrner (2010) conducted a study to assess the effectiveness of aromatherapy in controlling depression. The samples were selected by convenient sampling method. The samples received odor of the lavender oil, to reduce the depression.

Leith (2008) found that inhalation of diffused lavender oil is effective in enhancing the sleep quality. Randomized single blinded, cross over design as used this study. The results showed that aroma therapy was improvement of the quality of sleep.

Goel (2010) conducted a study to assess the effectiveness of aromatherapy on depression. The experimental group is presented with the massage of lavender oil. They identified that it reduced depression level.

Kuritama (2008) conducted a study to evaluate the effectiveness of aromatherapy massage with lavender reduce the level of anxiety and depression. The findings revealed that were effective in reducing the anxiety and depression.

Baylak and Racine (2009) Effectiveness of aromatherapy on reduce the level of depression .Massage with lavender oil .The results to identified to reduce the depression level. Results indicated that 22.8% has major depression and 2.7% made in suicidal attempt.

Smallood (2010) a randomized controlled trail among dementia patients ,to identify the effectiveness of aroma therapy and massage, reduction of excessive motor behavior. The findings revealed that aromatherapy and massage greatly reduces excessive motor behavior.

SECTION III: REVIEW RELATED TO EFFECTIVENESS OF AROMA THERAPY ON DEPRESSION

Yim V.C (2010) studied of aromatherapy for patients with Depressive symptoms. The tools used were hospital anxiety and depression scale..The aromatherapy massage with lavender oil as given for 30mts.The findings revealed that aromatherapy had improved the mood of reduce the depressive level.

Kuriyama H (2010) Explained that massage therapy with essential oils help people with depression. The scents of aromatherapy stimulate positive emotions in the areas of brain which is responsible for memories and emotions. A persons belief also contributes to the enhancement of mood.

Massage treatment alone has been shown to be an effective treatment to help patients with depression, In one study conducted at the university in teenagers for depression, The massage reduced the level of depression.

Chang SY(2011)conducted a study to examine the effect of aroma hand massage and depression in hospice old age patient with terminal cancer.non equivalent control group pre test and post test design was used.60 subjects were selected,30 in experimental group, and 30 in control group, the experimental group went through aroma hand massage on each hand for 5 minutes for 7 days, control

group went through general oil hand massage. The results shows that aroma hand massage experimental group showed more significant changes in pain score($t=3.52$) and depression($t=8.99$)than control group.

Francis P,Morris J(2011)conducted a study to assess the effectiveness of aroma therapy on reduce the level of depression among senior citizens. Totally 60 participants were randomized in to 3 groups. intervention given for 4 weeks. The depression was assessed by geriatric depression scale. The result shows that there were substantial improvement in all 3 groups with 18% improvement in geriatric depression scale.

wonderful life home care and assisted living article (2010)states that, study conducted for senior citizens with depression by using aroma therapy, shows the result that aroma oil acts as a anti depression and reduces the depression level.

Wilkinson SM (2010)conducted a study to evaluate the effectiveness of aroma therapy in the management of anxiety and depression in old age peoples. The 60 sample selected .quasi experimental design was used in this study.30 in experimental group ,30 in control group. The results shows that patient receiving aroma therapy massage described greater improvement in anxiety and depression.

CONCEPTUAL FRAMEWORK

Conceptual frame work represents less formal attempt at organizing phenomenon than theories. Conceptual models can serve a springboards for generating research hypothesis.

The conceptual model represents conceptualizations of the nursing process and the nature of nurse client relationships. The purpose of the conceptual framework is to provide a logical, coherent structure through which phenomena of concern can be understood and discussed.

A theoretical framework can be defined as set of concepts and assumptions that integrates them into meaningful configuration.

-pewit

The present study aims at evaluating, the effectiveness of aroma therapy in reducing depression among old age residing at selected old age home in Dindigul. The conceptual framework of the present study is based on the Imogene M.Kings theory of goal attainment. According to the theorist, decision making is a shared collaborative process in which old age with depression and the nurse shares information with each other, helps to identify goals related to selected aroma therapy and explore means and measures to attain the goal regarding the selected therapy and finally moves forward for goal attainment.

The major elements in the theory of goal attainment are seen in the interpersonal systems. The concepts of the theory are,

- Interaction
- Perception
- Communication
- Transaction
- Judgement

Interaction

In this study, it indicates the pre-test. The researcher assess the demographic variables such as, age, sex, marital status, religion, domicile, support system, duration

of stay in the old age home, performance of activities in daily living ,nature of admission, education.

Perception

It is defined as each person's representation of reality. The elements of perception are importing energy from the environment and organizing it by information, transforming energy, processing information and exporting information in the form of overt behavior. In this study the researcher classifies the samples into three groups with mild, moderate and severe after the pre-test.

Communication

It is the process whereby the information is transferred from one person to another either directly in face to face or through written words. In researcher explain the subjects about aroma therapy.

Transaction

It is a process in which communication takes place between human beings and the environment to achieve goals. In this model, humans are in consent interaction with their environment. In this study, the samples understand about the aroma therapy and gives consent to the therapy.

Action

Each member makes judgement and thereby action follows to attain goal. The researcher provides aroma therapy to the samples to reduce the level of depression.

Judgement

In this study, the researcher assesses the post test level of depression. The goal is said to be achieved when there is reduction in the level of depression as a result of aroma therapy among old age residing at selected old age home.

Summary

This chapter dealt with review of literature and conceptual frame work related to old age depression, effectiveness of Aroma therapy and effectiveness of Aroma therapy on depression.

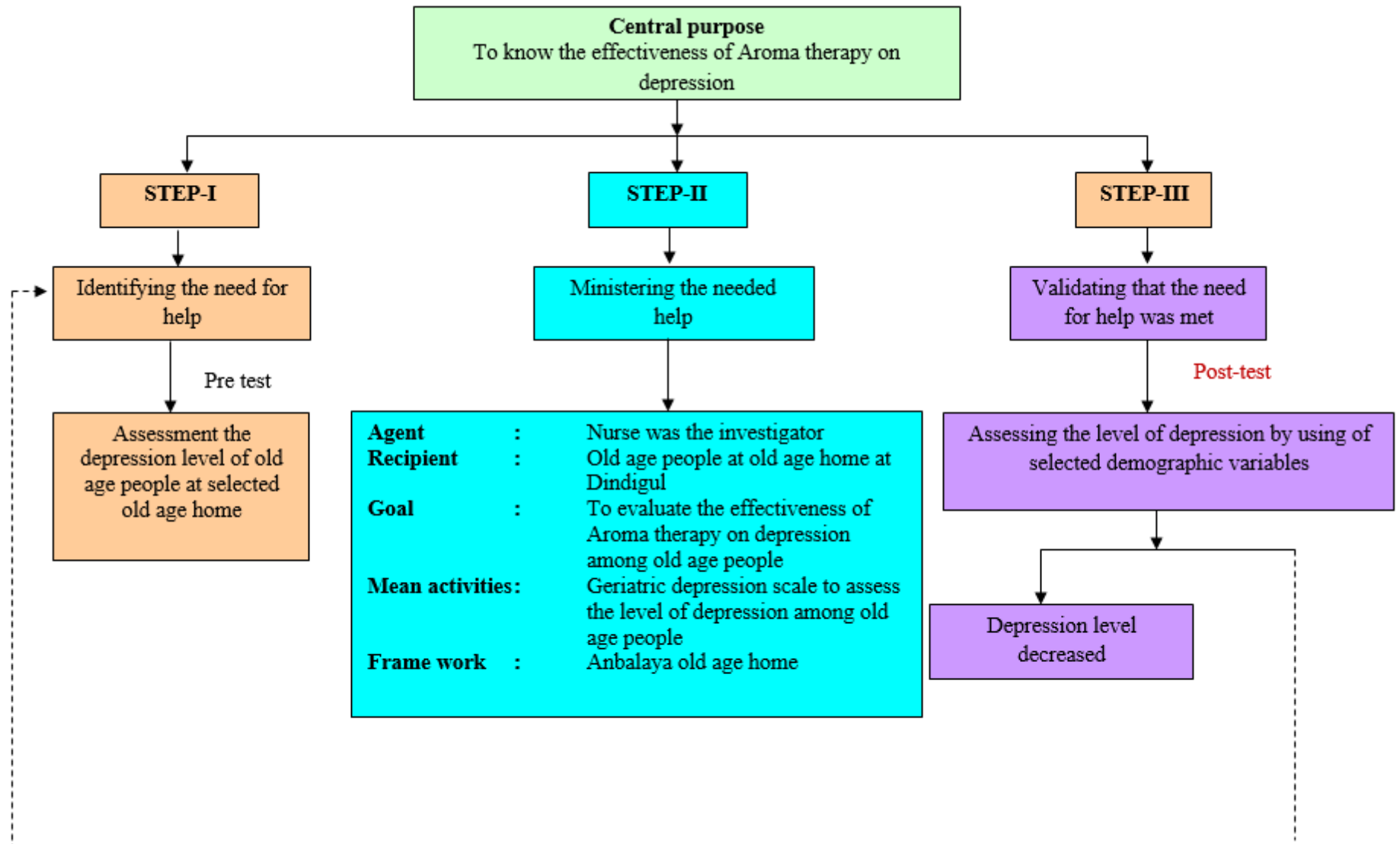


Figure –: Theoretical Framework Based On Wiedenbach's Helping Art Model For Clinical Practice

METHODOLOGY



CHAPTER III

METHODOLOGY

The research methodology indicates the general pattern of organizing the procedure for gathering valid and reliable data for an investigation. This chapter provides a brief description of the method adopted by the investigator in this study. It includes the research approach, research design, setting of the study, population, sample, sample size, sampling technique, description of the tool, pilot study, data collection procedure and plan for data analysis.

RESEARCH APPROACH

Quantitative evaluative research approach was used in this study to assess the effectiveness of aromatherapy on depression among old age in selected old age home at Dindigul.

RESEARCH DESIGN

A quasi experimental design was used for this study.

Group	Pre-test	Intervention	Post-test
Experimental group	O1	X(Aroma therapy)	O2
Control group	O1		O2

Key

O1 - Pre assessment of the level of depression

X - Aroma therapy

O2 - Post assessment of the level of depression

VARIABLES

Dependent variable - Depression

Independent variable - Aroma therapy

SETTING OF THE STUDY

The study was conducted at Anbalaya old age home .The old age home situated approximately 10 km from Jainee college of Nursing. Nearly 75 old age people were stayed in that old age homes. It has two floors built out of 2500 sq .ft Anbalaya charitable trust the Campus at calm place for reading books ,cooking , gardening .the premises are also utilized for conducting free medical camps for the benefit for the villagers living in and around the home . By this, every individual at this home develops the feeling that it is their home.

STUDY POPULATION

The study population comprises of old age people in old age home at Dindigul.

SAMPLE

Old age people who fulfilled the inclusion criteria was selected as samples.

SAMPLE SIZE

The total sample size was 60, 30 in the experimental group and 30 in the control group.

SAMPLING TECHNIQUE

Purposive sampling technique was used for this study.

CRITERIA FOR SAMPLE SELECTION

The samples for the study were selected based on the following criteria.

Inclusion criteria

Old ages who admitted in old age home at Dindigul.

- Old ages who can speak and understand Tamil / English
- Old ages who were willing to participate in this study.
- Old ages who were co operative during study period.

Exclusion criteria

- Clients above 50 years of age
- Not willing to participate in this study.
- Not able to speak Tamil & English
- Not present during the data collection period

RESEARCH TOOL AND TECHNIQUE

The tool consists of 2 parts

Part I

It consisted of an unstructured interview guide, which had questions related to the demographic data of the patient.

Demographic data included were age, sex, marital status, religion, domicile, support system, duration of stay in the old age home, performance of activities of daily living, nature of admission, and education.

Part II

The geriatric depression Scale was used to assess the level of depression. It is a non standardized tool..It is a 30 item questionnaire that is a simple, clear, self administered scale by answering yes/ no type. takes 10-20 minutes to complete. Each item carries one point with a maximum possible score of 30.

SCORE INTERPERATION

The total score obtained was interpreted as follows:

- 0-9 indicates mild depression
- 10- 19 indicates moderate depression
- 20-30 indicates severe depression

TESTING OF THE TOOL

Validity

Validity of the tools was obtained on the basis of psychiatrist, psychologist, nursing experts and medical experts in the field of mental health nursing. The tool was found adequate and minor suggestion given by experts was incorporated. The tools were translated into Tamil.

Reliability

Reliability of the tool to assess the effectiveness of aromatherapy was established using test – retest method. The rank correlation coefficient was used to calculate the reliability and this was found to be $r=0.8$. It was highly reliable

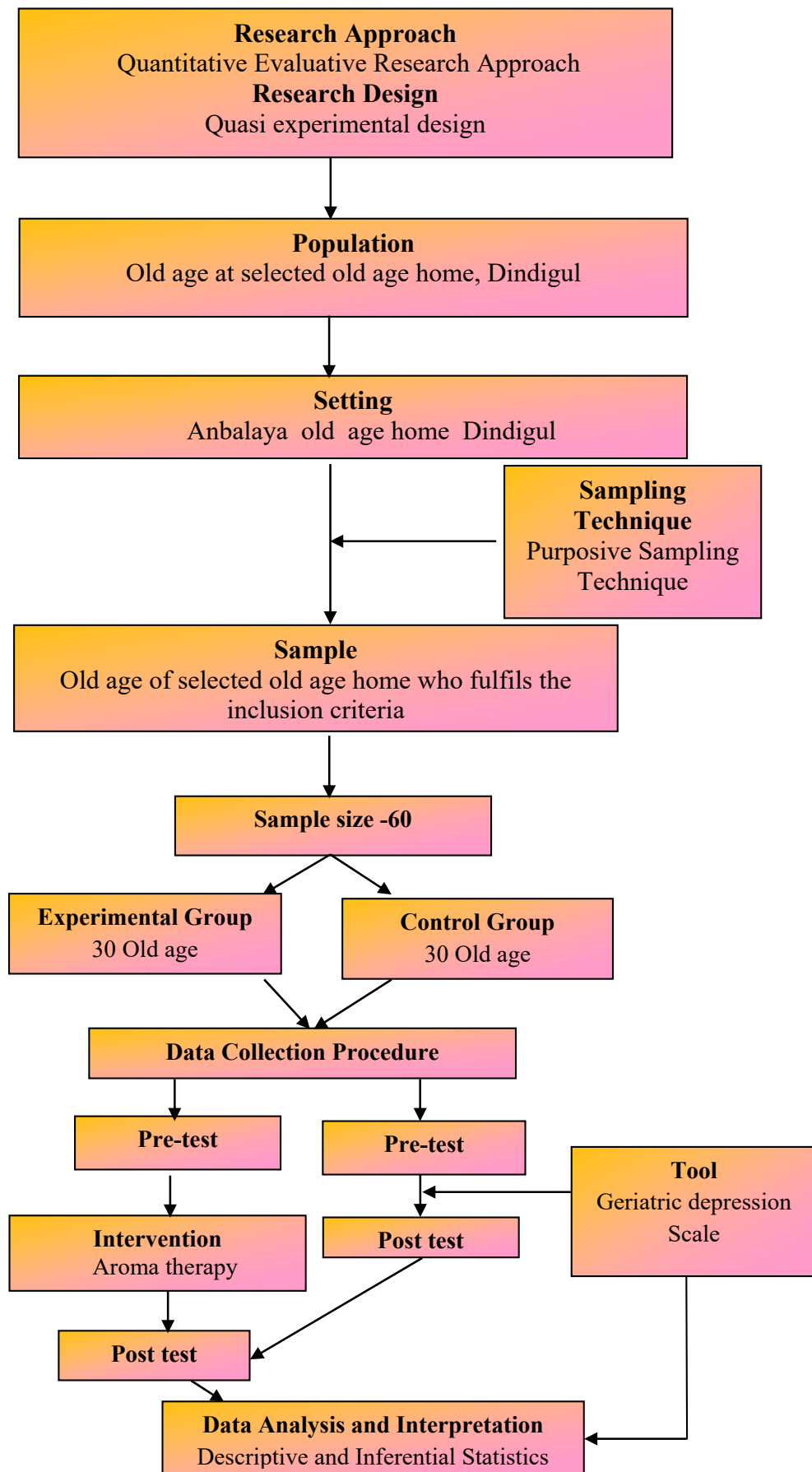


Fig-1.2: Schematic Representation of Research Methodology

Development of intervention: (Aroma Therapy)

Definition:

Aromatherapy is a form of alternative medicine that uses plant materials and aromatic plant oils, including essential oils, and other aromatic compounds for the purpose of altering one's mood, cognitive, psychological or physical wellbeing.

PROCEDURE FOR AROMA THERAPY

The five drops of lavender oil in 10ml of gingili oil for massaging from head to shoulder.. Massage is given for 20mts with bare hands using techniques like stroking, combing, scratching, tapping, pulling. The therapy is given twice weekly for a period of four weeks.

PILOT STUDY

Pilot study was conducted in the Anbalaya old age home at Dindigul, after obtaining permission from old age home. Following which data was collected from 6 old age who fulfilling the inclusion criteria. They are divided into 2 groups. 3 in the experimental group and 3 in the control group. The depression was assessed using Geriatric Depression Scale, developed by the researcher.

The finding of the pilot study showed that the calculated “t” value was 6 which shows effectiveness of aroma therapy on depression was highly significant at $p < 0.001$.

DATA COLLECTION PROCEDURE

Prior to the data collection, the necessary permission was obtained from the Principal, Jainee College of Nursing, the investigator met the authorities of the Anbalaya home for aged at Dindigul. Self introduction was given and details regarding the nature of the study were explained to the old age.

The written consent was obtained from the participants, the selected samples were approached with study questionnaire and the level of test depression was

identified. Aroma therapy based on the incorporating suggestions of experts and knowledge gained.

At the end of 30 days of practicing Aroma therapy, the level of test depression of the study subjects were reassessed, and the differences in score of test depression was considered as the effectiveness of aroma therapy.

TABLE: 1 SCHEDULES FOR DATA COLLECTION PROCEURE

S. No	Time	Name of the place	Number of subject	Pre-test	Intervention	Post test
1	9.30a.m 4.p.m	Anbalaya old age home	60	1/06/16	1/06/16 to 30/06/16	30/06/16

- Time spent to assess the test depression level of old age (pre-test) was 10-20 minutes.
- Aroma therapy was given and was encouraged. The time spent was one day
- A period of 4 weeks was allowed for subjects for aroma therapy was reassessed (post test)

PLAN FOR STATISTICAL ANALYSIS

Data analysis was done according to the objectives of the study. Both descriptive and inferential statistics were used.

Descriptive statistics

Frequency percentage and mean were used for analysis of pre-test and post test assessment.

Inferential statistics

Independent and paired “t” test was used to determine the difference between pre-test and post test in terms of effectiveness of aroma therapy. Chi-square was used to determine the association between the selected variables.

DATA ANALYSIS & INTERPRETATION



CHAPTER-IV

ANALYSIS AND INTERPRETATION OF DATA

Analysis is a process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested (Polite and Hungler, 1999).

This chapter deals with the analysis and interpretation of data collected from 60 samples to “A study to assess the effectiveness of Aroma therapy on depression among old age people at selected old age Home Dindigul”. Statistical analysis renders quantitative information to the researcher to summarize, organize, evaluate, interpret, and communicate numerical information. The interpreted data presented in tables and figures.

Analysis and interpretation of the data were based on collection of the data through purposive sampling. In order to analyse the demographic data descriptive statistics like frequency and percentage were used. To assess the effectiveness of aroma therapy on reducing depression was used inferential statistics such as paired student t, test, to find out the association with demographic variables Chi-square was used.

ORGANISATION OF DATA

The data collected was analysed and interpreted according to the objectives under the following sections.

SECTION I

Table 2

Describes frequency and percentage distribution of samples.

SECTION II [Table 3 to 5]

Table 3

Describes the distribution of samples according to the level of depression in experimental and control group.

Table 4

Illustrates the comparison of mean pre-test and post-test level of depression of samples in experimental group.

Table 5

Portrays the Comparison of mean post-test level of depression of samples in experimental and control group.

SECTION III**Table 6**

Describe the association between post-test level of depression and selected demographic variables such as age, sex, marital status, religion, domicile, support system, Duration of stay in old age home, activities of daily living, nature of admission, educational status in experimental group.

**TABLE 2: FREQUENCY AND PERCENTAGE DISTRIBUTION
OF SAMPLES ACCORDING TO DEMOGRAPHIC PROFILE**

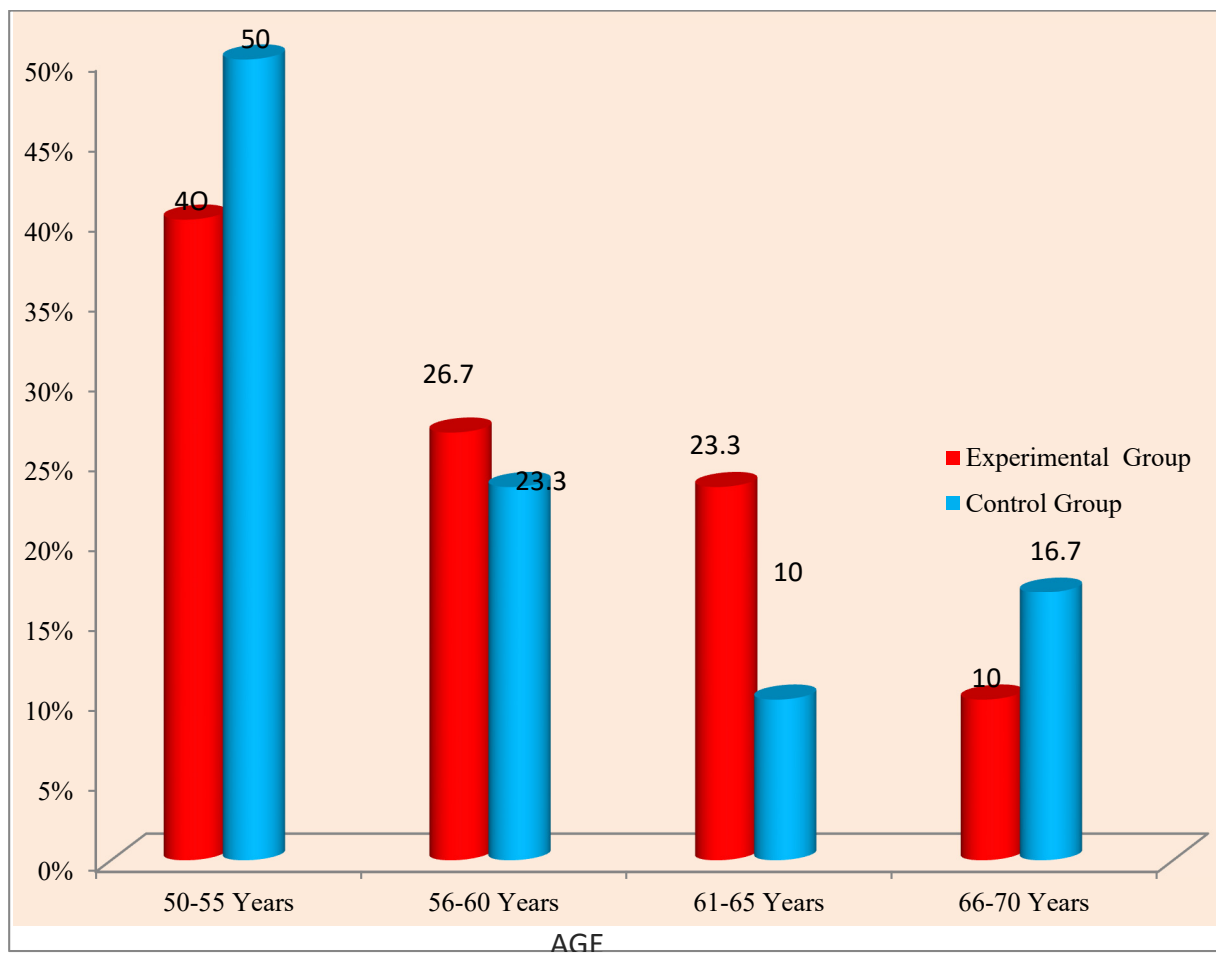
S.No	Demographic characteristics		Experimental group		Control group	
			F	%	F	%
1	Age	a)50-55 years	12	40	15	50
		b)56-60 years	8	26.7	7	23.3
		c)61-65 years	7	23.3	3	10
		d)66-70 years	3	10	5	16.7
2	Sex	a)Male	22	73.3	12	40
		b)Female	8	26.7	18	60
3	Marital status	a) Married	13	43.3	12	40
		b) Unmarried	4	13.3	3	10
		c) Divorced	2	6.7	3	10
		d) Separated	6	20	7	23.3
		e) Widow/	5	16.7	5	16.7
		Widower				
4.	Religion	a) Hindu	22	73.3	19	63.3
		b) Muslim	-	-	2	6.7
		c) Christian	8	26.7	9	30
5.	Domicile	a) Urban	17	56.7	20	66.7
		b) Rural	13	43.3	10	33.3
6.	Support system	a) Family	16	53.3	13	43.3
		b) Relatives	8	26.7	8	26.7
		c) Friends	3	10	6	20
		d) Others	3	10	3	10
7	Duration of stay in old age home	a) Below 1 year	5	16.7	7	23.3
		b) 1-2 years	3	10	8	26.7
		c) 2-3 years	2	6.7	3	10
		d)3-4 years	6	20	3	10
		e)Above 4 years	14	46.7	9	30

8	Performance of activities in daily living	a) Independent	26	86.7	22	73.3
		b) Partially independent	4	13.3	8	26.7
		c) Use of assertive devices	-	-	-	-
9	Nature of admission	a) Voluntary	20	66.7	15	50
		b) Forced by children	10	33.3	15	50
10	Education	a) Illiterate	9	30	6	20
		b) Primary	3	10	5	16.7
		c) Secondary	5	16.7	6	20
		d) Higher secondary	6	20	9	30
		e) Graduate	7	23.3	4	13.3

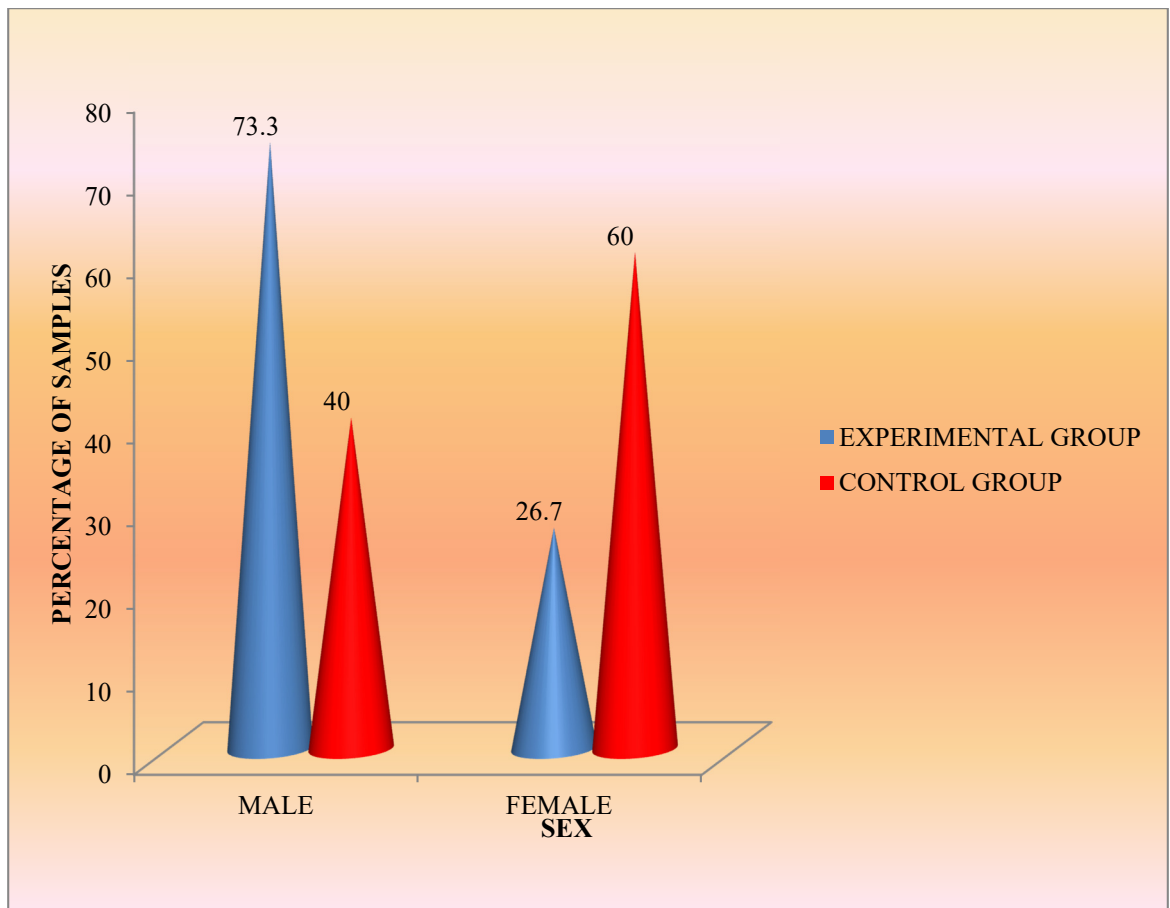
Table 2

Reveals that in experimental group majority (40%) of the samples were in the age group of 50-55 years in experimental group and control group (50%), (26.7%) of samples belonged to the age group of 56-60 years in experimental group and control group (23.3%) ,(23.3%) of samples belong to age group of 61-65years in experimental group and control group (10%), and (10%) of samples belong to age group of 66-70 years in experimental group and control group (16.7%). Regarding the sex status (73.3%) of males in experimental and(40%) in control group, and (26.7%) of females belong to experimental group (60%) in control group.. Regarding marital status about (43.3%) were in the married in experimental group and control group (40%).(13.3%) were in the unmarried in experimental group and control group (10%), (6.7%) were in the divorced in experimental group and control group (10%), (20%) were in the separated in experimental group and control group (23.3%), widow/widower criteria in experimental group (16.7)and (16.7%) were in the widow criteria in control group. In the experimental groups the patients was Hindu by religion (73.3%) in experimental group and control group(63.3%). Muslim by religion (6.7%) in control group. Christian by religion (26.7%) in experimental group

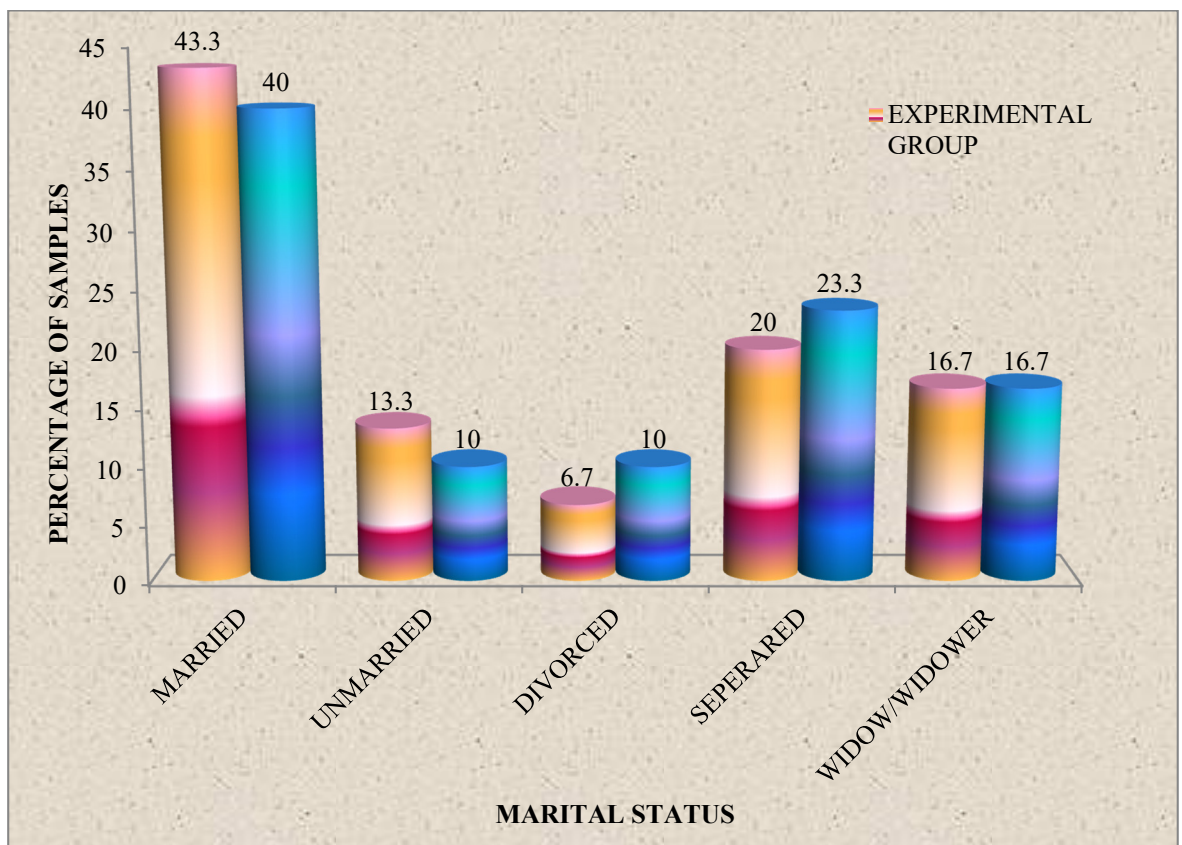
and control group(30%). In the groups most of the patients were hailing from urban (56.7%) in experimental group and(66.7%) in control group. Rural (43.3%) in experimental group and (33.3%) in control group. Regarding support system about (53.3%) were in family support in experimental group and control group (43.3%),(26.7%) were in relatives support in experimental group and control group (26.7%)%,(10%) were in friends support in experimental group and control group (20%),(10%) were in others support in experimental group and control group (10%), Regarding the duration of stay in the old age home below 1 years (16.7%) experimental group and control group(23.3%) , 1-2 years (10%) experimental group and control group(26.7%) , 2-3 years (6.7%) experimental group and control group(10%),3-4 years (20%) experimental group and control group(10%) (46.7%)above 4years experimental group and control group(30%) . Regarding performance of activities of daily living (86.7%) independent experimental and control group (73.3%) ,(13.3%)partially independent in experimental and control group(26.7%). Recording the nature of admission to the old age home (66.7%) was in voluntary admission in experimental group(50%)in control group, (33.3%) forced by children's in experimental group (50%) in control group. Regarding educational status were illiterate(30%) experimental and control group (20%), primary(10%) experimental and control group (16.7%), secondary(16.7%) experimental and control group (20%). Higher secondary(20%) experimental and control group (30%). graduate(23.3%) experimental and control group (13.3%).



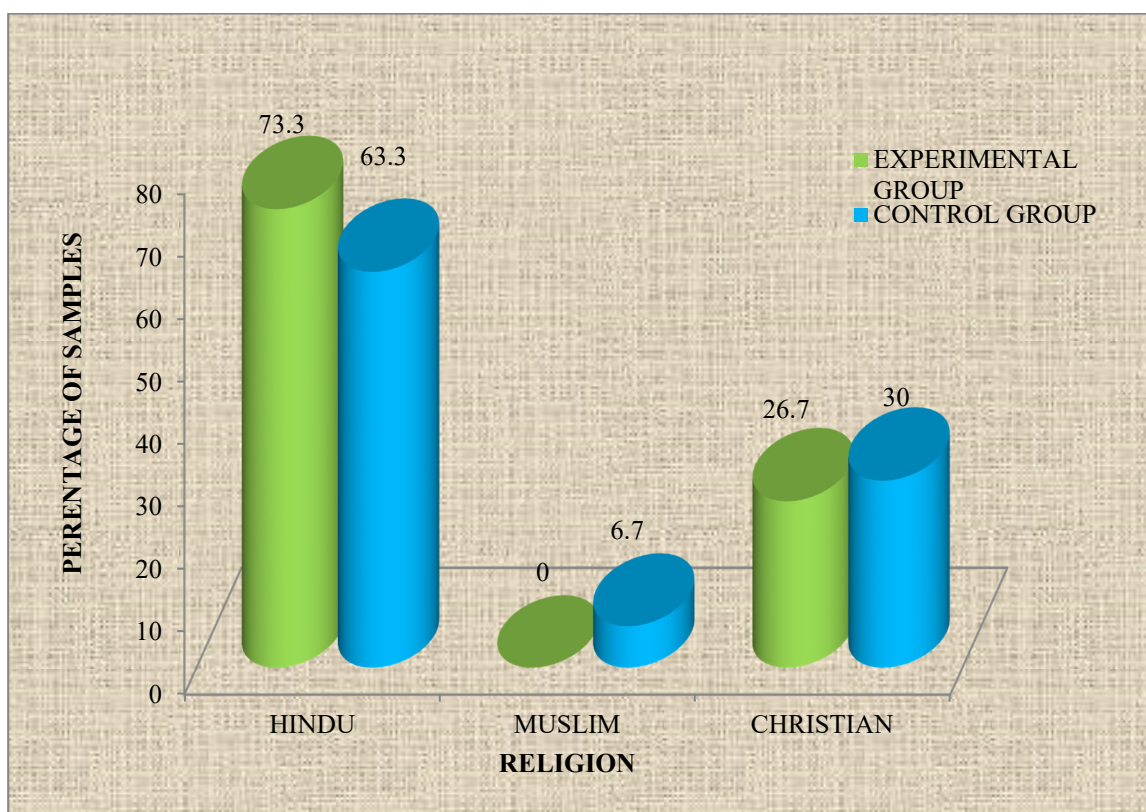
2.1 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR AGE IN EXPERIMENTAL AND CONTROL GROUP.



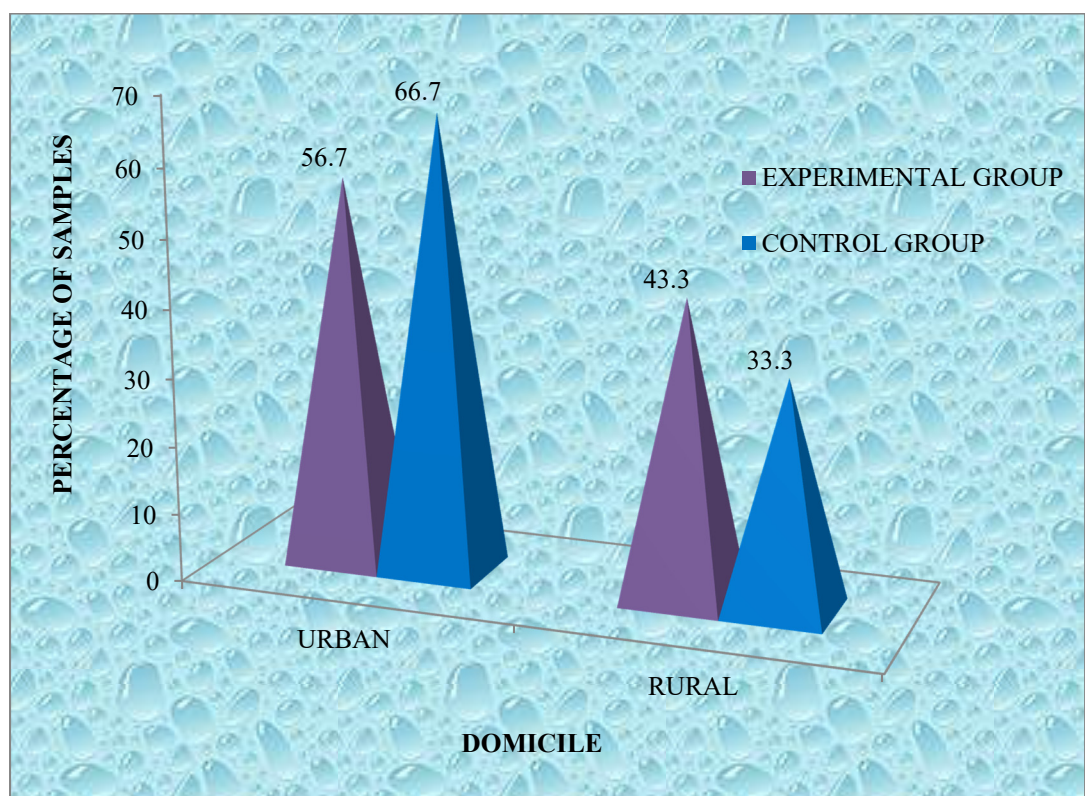
2.2 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR SEX IN EXPERIMENTAL AND CONTROL GROUP



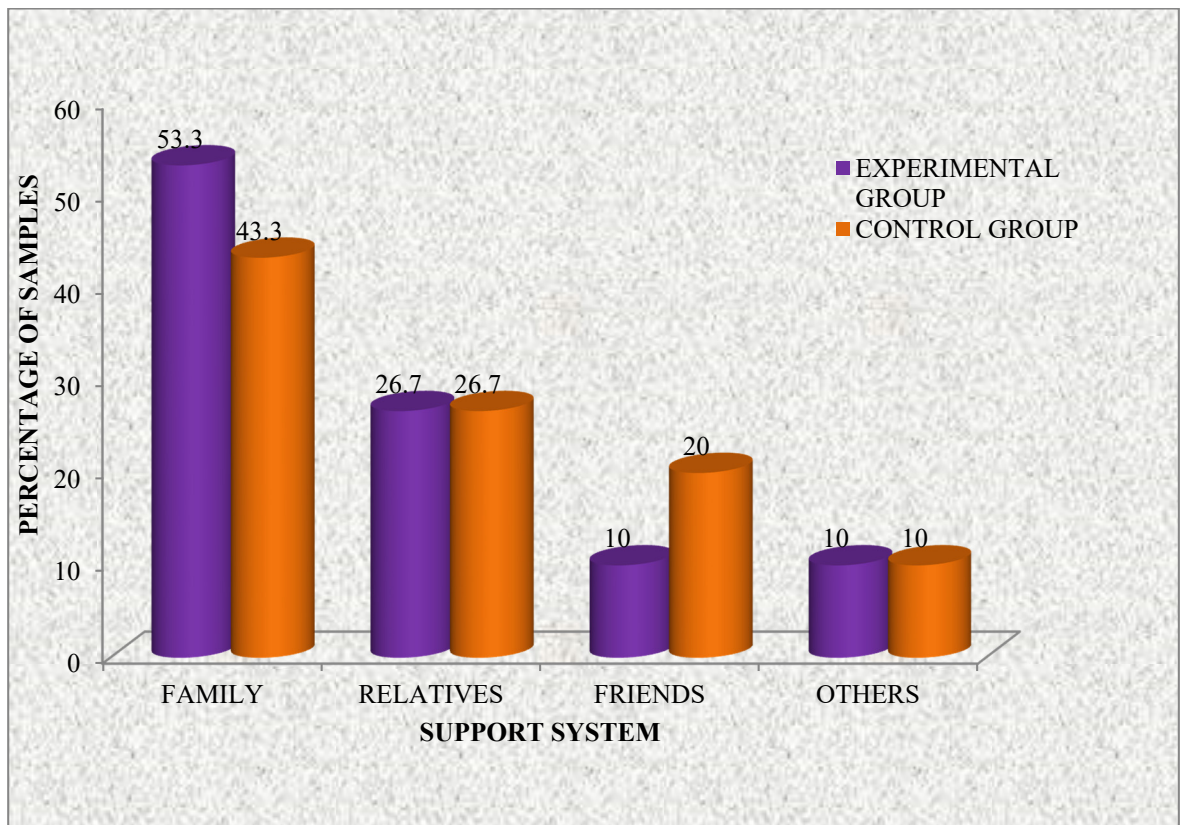
2.3 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR MARITAL STATUS IN EXPERIMENTAL AND CONTROL GROUP



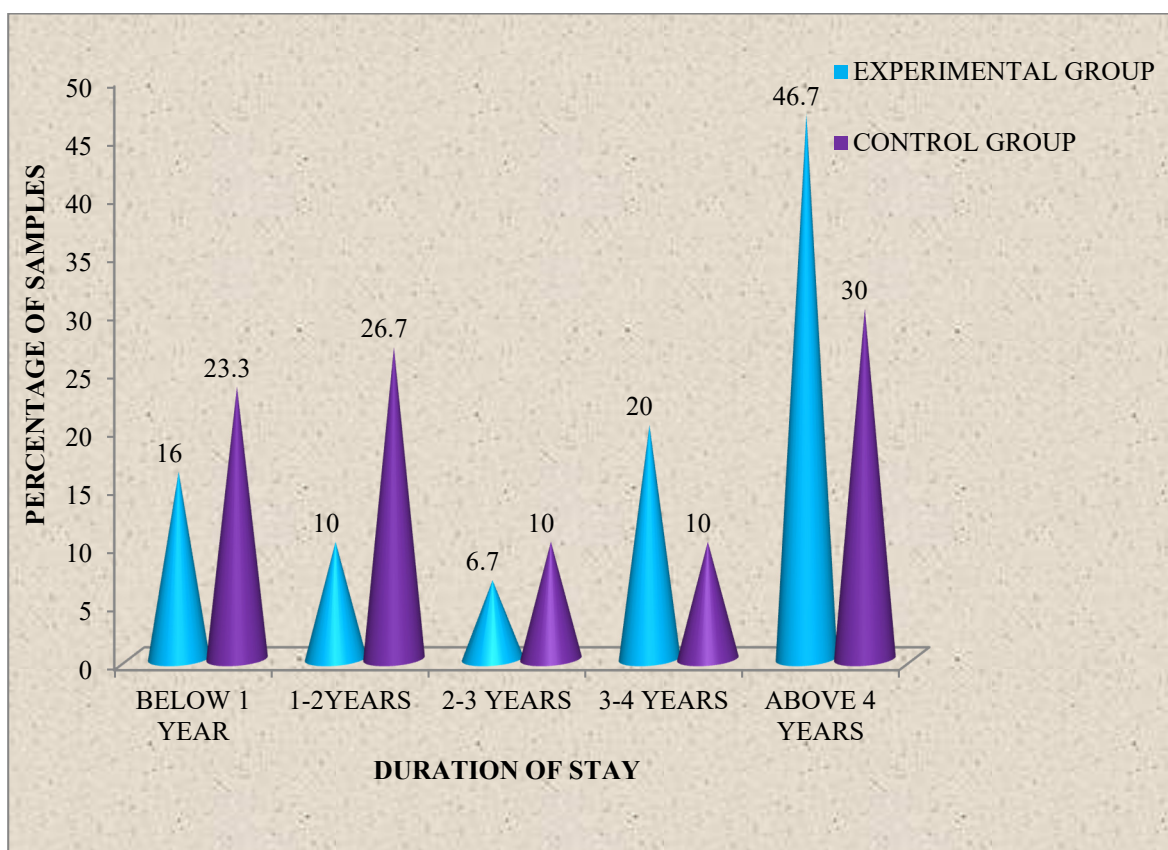
2.4 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR RELIGION IN EXPERIMENTAL AND CONTROL GROUP



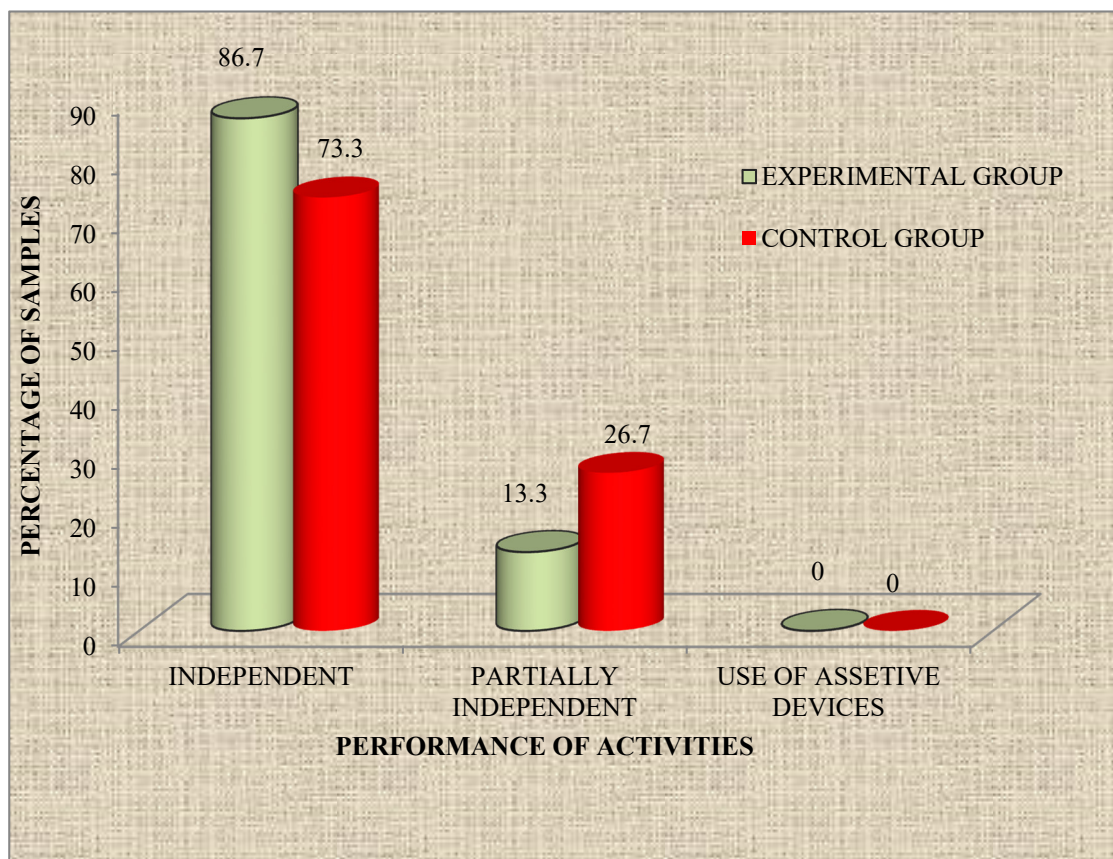
2.5 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR DOMICILE IN EXPERIMENTAL AND CONTROL GROUP



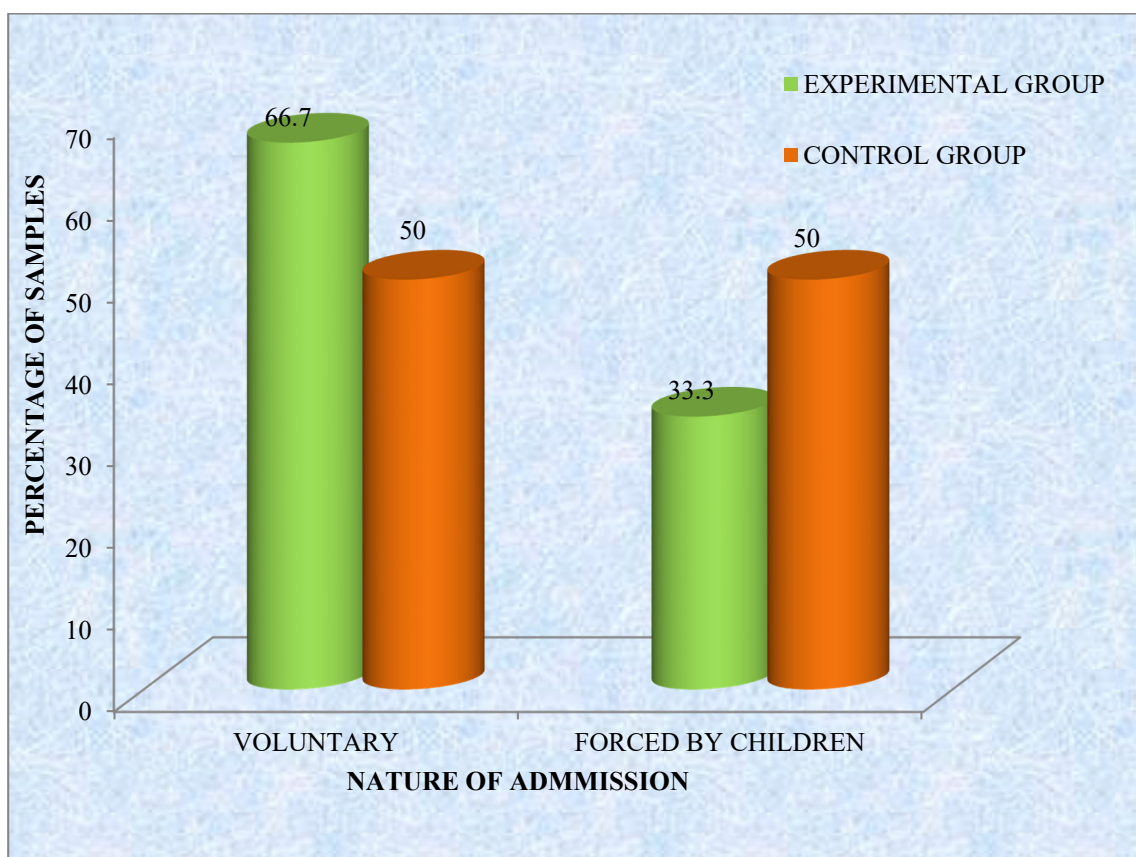
2.6 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR SUPPORT SYSTEM IN EXPERIMENTAL AND CONTROL GROUP



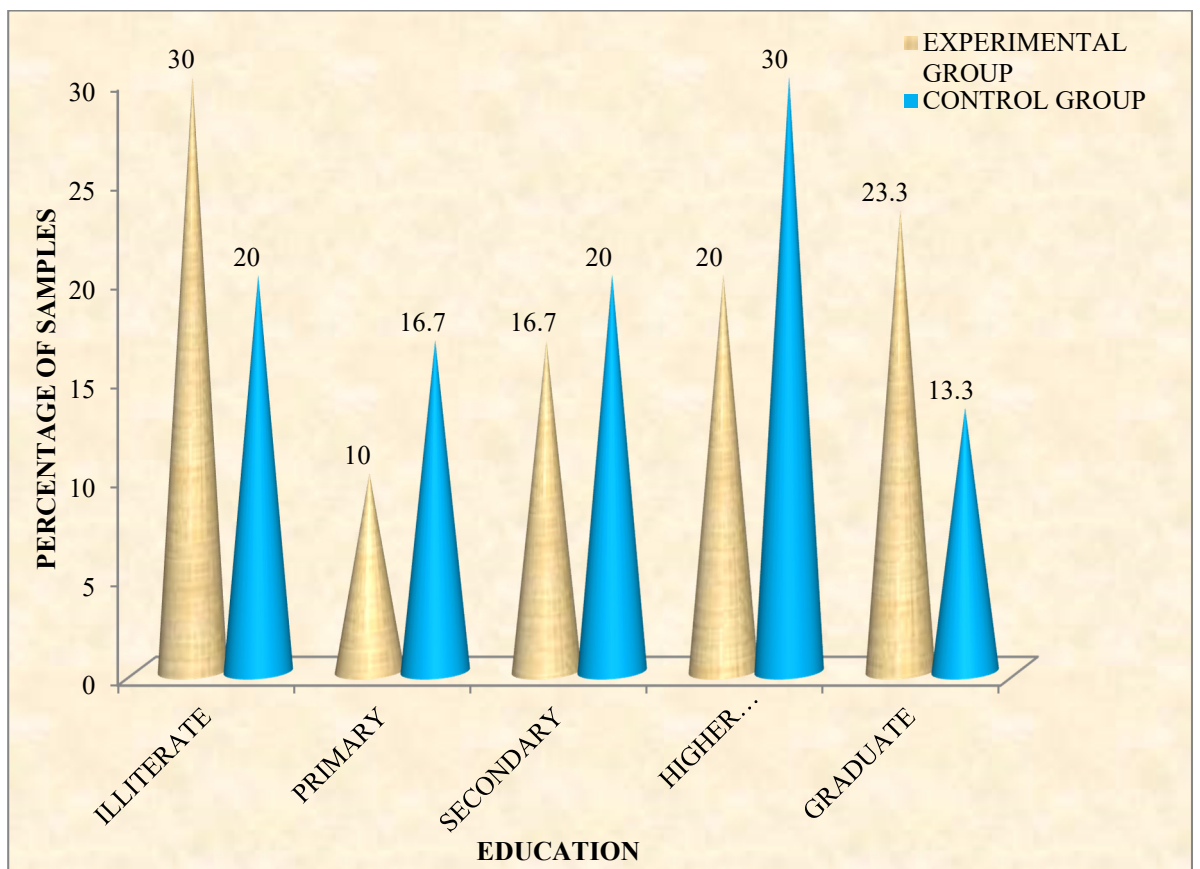
2.7 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR DURATION OF STAY IN OLD AGE HOME IN EXPERIMENTAL AND CONTROL GROUP



2.8 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR PERFORMANCE OF ACTIVITIES IN DAILY LIVING IN EXPERIMENTAL AND CONTROL GROUP



2.9 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR NATURE OF ADMISSION IN EXPERIMENTAL AND CONTROL GROUP



2.10 PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR EDUCATION IN EXPERIMENTAL AND CONTROL GROUP

TABLE.3
DISTRIBUTION OF SAMPLES ACCORDING TO THE LEVEL OF
DEPRESSION IN EXPERIMENTAL AND CONTROL GROUP

Depression level	Experimental group n=30				Control group n=30			
	Pre-test		Post test		Pre-test		Post test	
	f	%	f	%	f	%	f	%
mild 0-9	12	40	19	63	14	47	13	43
Moderate (10-19)	18	60	11	37	16	53	17	57
Severe 20-30	-	-	-	-	-	-	-	-

Table: 3 Depicts the pre-test & post test scores of both experimental & control group. Among the experimental group majority of the samples (60%) experienced mild level of depression and 12 out of 30 (40%). But in the post test majority of the samples experienced mild level of depression (63%), 11 out of 30 (37%) experienced moderate level of depression. In control group in the pre-test , majority of the samples experienced moderate level of depression (53%) 14 out of 30 (47%) in the post test , majority of the samples experienced moderate level of depression (57%) experienced mild level of depression and 13 out of 30 (43%) .

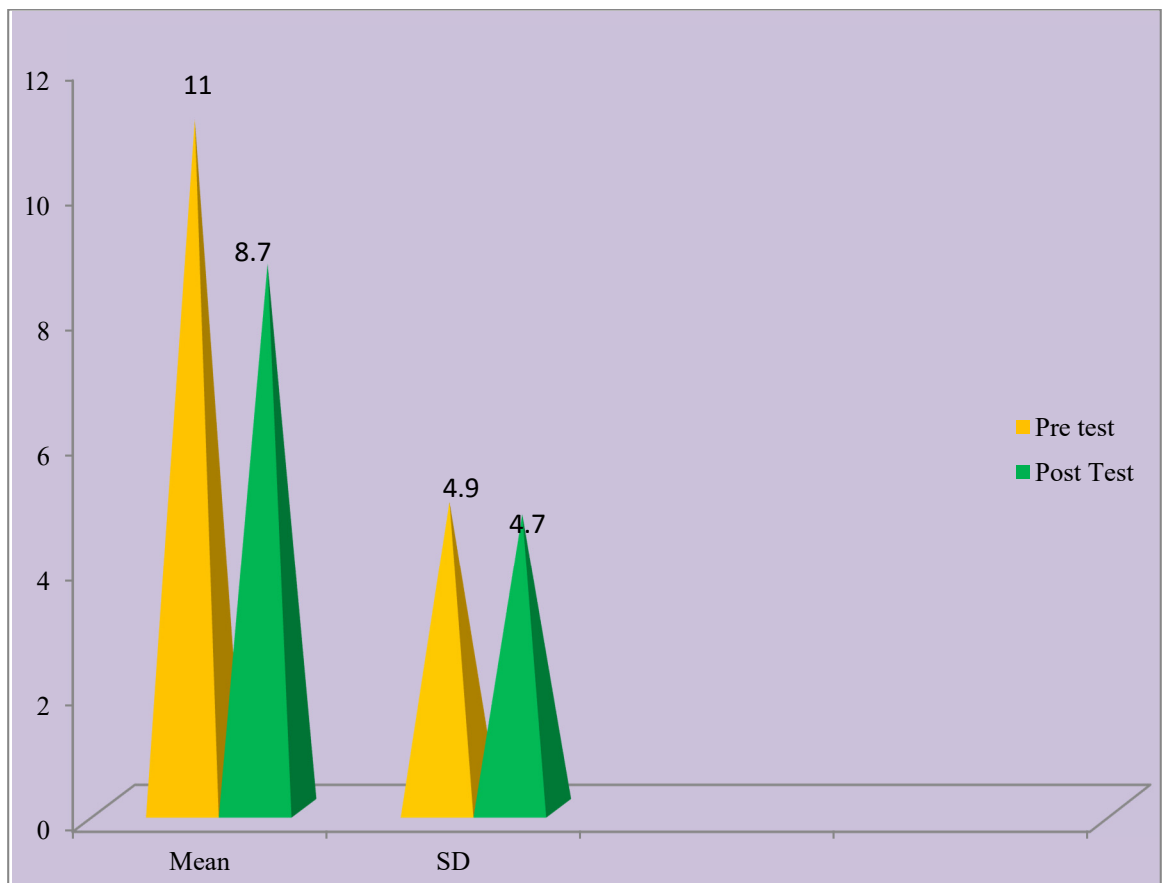
TABLE 4
COMPARISON OF MEAN PRE-TEST AND POST TEST LEVEL OF
DEPRESSION OF SAMPLES IN EXPERIMENTAL GROUP

n=30

Measurement	Mean	Mean Difference	SD	't' value	Df	'p' value
Pretest	11	2.3	4.9	10.5	29	0.001
Post test	8.7		4.7			

H1 – The mean post test depression score of the old age will be significantly lesser than the mean pre-test depression score of the old age who will have aroma.

Table: 4 represents that in experimental group the mean post test depression score of 8.7 The obtained 't' value 10.5 statistically significant at 0.001. This indicates that the mean difference of 2.3 is a true difference. The above findings support the research hypothesis. So the researcher rejected the null hypothesis and accepted the research hypothesis



4.1 COMPARISON OF MEAN PRE-TEST AND POST TEST LEVEL OF DEPRESSION OF SAMPLES IN EXPERIMENTAL GROUP

TABLE 5
COMPARISON OF MEAN POST TEST LEVEL OF DEPRESSION
BETWEEN EXPERIMENTAL AND CONTROL GROUP

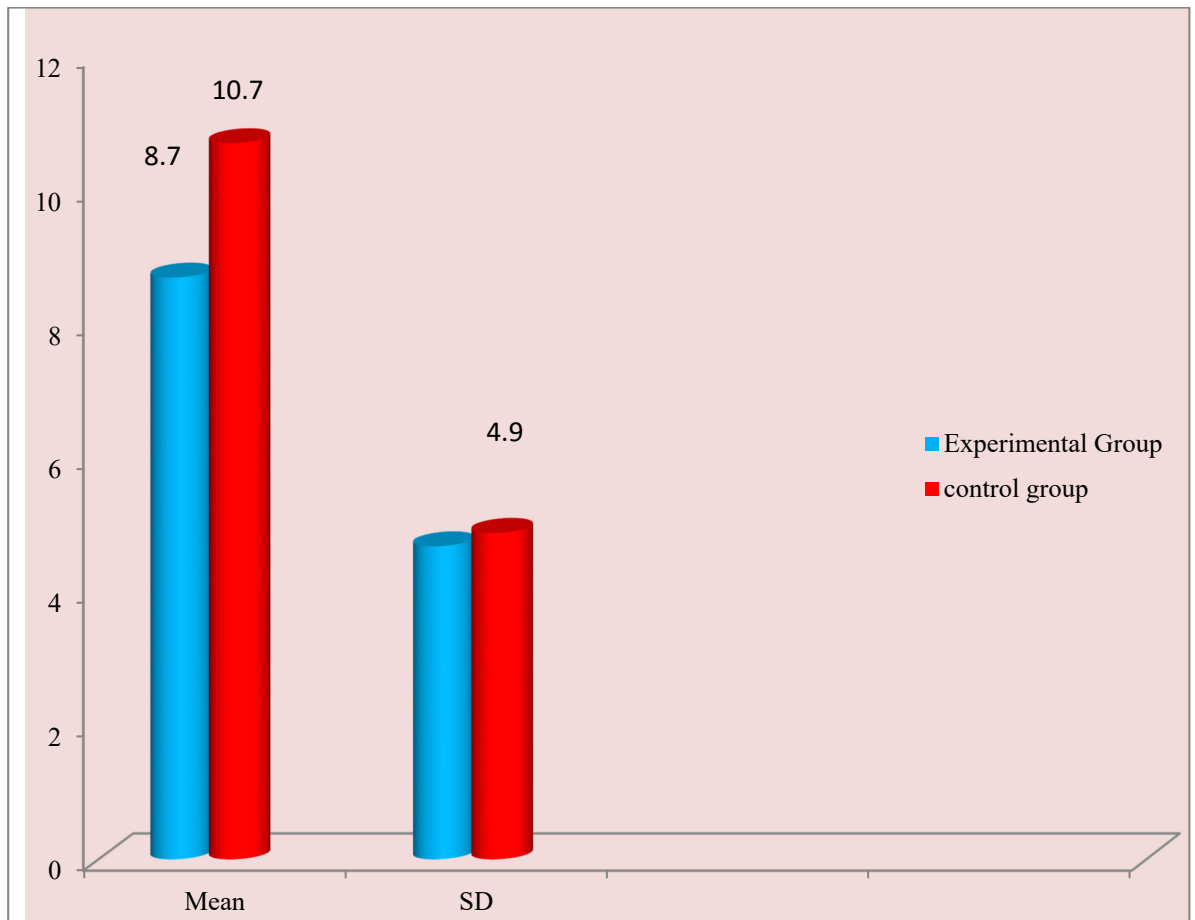
n = 60

Measurement	Mean	Mean difference	SD	't' value	D f	'p' value
Experimental group	8.7	2	4.7	10.5	59	0.001
Control group	10.7		4.9	10.1		

Significant at 0.001 levels.

To compare the mean post test depression level of the experimental group and the control group.

Summarizes that the mean post test depression score 8.7 of the experimental group was lesser than mean post test depression score 10.7 of the control group. The obtained 't' value 10.1 was statistically significant at 0.001 level.



**5.1 COMPARISON OF MEAN POST TEST LEVEL OF DEPRESSION
BETWEEN EXPERIMENTAL AND CONTROL GROUP**

SECTION III

TABLE 6

**ASSOCIATION BETWEEN POST TEST LEVEL OF DEPRESSION AND
SELECTED DEMOGRAPHIC VARIABLES OF SAMPLES OF
EXPERIMENTAL GROUP**

Demographic Variable	Mild	moderate	Total	Chi-square	D f	Table value
Age						
a)50-55 years	9	3	12	4.9 S	3	3.1
b)56-60 years	6	2	8			
c)61-65 Years	2	5	7			
d)66-70 Years	2	1	3			
Sex						
a) Male	13	9	22	0.5	1	12.7
b) Female	6	2	8			
Marital status						
a)Married	10	3	13	3 S	4	2.7
b)Unmarried	3	1	4			
c) Divorced	1	1	2			
d)Separated	3	3	6			
d) Widow/ Widower	2	3	5			
Religion						
a) Hindu	15	7	22	0.8	2	4.3
b) Christian	-	-	-	NS		
c) Muslim	4	4	8			
Domicile						
a) Urban	11	6	17	0.03	1	12.7
b) Rural	8	5	13	NS		

Support system						
a) Family	10	6	16	1.6	3	3.1
b) Relatives	6	2	8	NS		
C) Friends	2	1	3			
d) Others	1	2	3			
Duration of stay						
a)Below 1 Year	4	1	5	1.2	4	2.7
b) 1-2 year	2	1	3	NS		
c) 2-3 year	1	1	2			
d) 3-4 year	3	3	6			
e) Above 4 years	9	5	14			
Performance of activities in daily living						
a)Independent	17	9	26	0.6	2	4.3
b)Partially independent	2	2	4	NS		
c)use of assertive devices	-	-	-			
Nature of admission						
a)Voluntary	13	7	20	0.08	1	12.7
b)Forced by children	6	4	10	NS		
Education						
a) Illiterate	5	4	9			
b) Primary	2	1	3	0.4	4	2.7
c) Secondary	3	2	5	NS		
d) Higher secondary	4	2	6			
e)Graduate	5	2	7			

Table 6: shows that there is significant association between post test level of stress with demographic variables such as support system .

DISCUSSION



CHAPTER-V

DISCUSSION

This chapter deals with, the discussion of results of the data analysed, based on the objectives of the study and the hypothesis. The purpose of the study is “To assess the effectiveness of aroma therapy on depression among old age people at selected old age home Dindigul”.

The study consisted of 30 samples in experimental group and 30 samples in control group with normal, mild and moderate & severe level of depression. The tool used was Geriatric Depression Scale.

CHARACTERISTICS OF DEMOGRAPHIC VARIABLES

The findings of the study were discussed in this I Reveals that in experimental group majority (40%) of the samples were in the age group of 50-55 years in experimental group and control group (50%), (26.7%) of samples belonged to the age group of 56-60 years in experimental group and control group (23.3%) ,(23.3%) of samples belong to age group of 61-65years in experimental group and control group (10%), and (10%) of samples belong to age group of 66-70 years in experimental group and control group (16.7%). Regarding the sex status (73.3%) of males in experimental and(40%) in control group, and (26.7%) of females belong to experimental group (60%) in control group.. Regarding marital status about (43.3%) were in the married in experimental group and control group (40%).(13.3%) were in the unmarried in experimental group and control group (10%), (6.7%) were in the divorced in experimental group and control group (10%), (20%) were in the separated in experimental group and control group (23.3%), widow/widower criteria in experimental group (16.7)and (16.7%) were in the widow criteria in control group. In the experimental groups the patients was Hindu by religion (73.3%) in experimental group and control group(63.3%). Muslim by religion (6.7%) in control group. Christian by religion (26.7%) in experimental group and control group(30%). In the groups most of the patients were hailing from urban (56.7%) in experimental group and(66.7%) in control group. Rural (43.3%) in experimental group and (33.3%) in control group. Regarding support system about (53.3%) were in family support in experimental group and control group (43.3%),(26.7%) were in relatives support in

experimental group and control group (26.7%),(10%) were in friends support in experimental group and control group (20%),(10%) were in others support in experimental group and control group (10%), Regarding the duration of stay in the old age home below 1 years (16.7%) experimental group and control group(23.3%) , 1-2 years (10%) experimental group and control group(26.7%) , 2-3 years (6.7%) experimental group and control group(10%),3-4 years (20%) experimental group and control group(10%) (46.7%)above 4years experimental group and control group(30%) . Regarding performance of activities of daily living (86.7%) independent experimental and control group (73.3%) ,(13.3%)partially independent in experimental and control group(26.7%). Recording the nature of admission to the old age home (66.7%) was in voluntary admission in experimental group(50%)in control group, (33.3%) forced by children's in experimental group (50%) in control group. Regarding educational status were illiterate(30%) experimental and control group (20%), primary(10%) experimental and control group (16.7%), secondary(16.7%) experimental and control group (20%). Higher secondary(20%) experimental and control group (30%). graduate(23.3%) experimental and control group (13.3%).

The first objective of the study was to determine the pre-test and post test of the depression among old age in the experimental and control groups

Depicts the pre-test & post test scores of both experimental & control group. Among the experimental group majority of the samples (60%) experienced mild level of depression and 12 out of 30 (40%). But in the post test majority of the samples experienced mild level of depression (63%), 11 out of 30 (37%) experienced moderate level of depression. In control group in the pre-test , majority of the samples experienced moderate level of depression (53%) 14 out of 30 (47%) in the post test , majority of the samples experienced moderate level of depression (57%) experienced mild level of depression and 13 out of 30 (43%) .

These findings portray the benefits of aroma therapy in reducing depression among the experimental group where as the depression was not mediated in control group.

Second objective of the study was to assess the effectiveness of aroma therapy on depression among old age.

Represents that in experimental group the mean post test depression score of 8.7 The obtained 't' value 10.5 statistically significant at 0.001. This indicates that the mean difference of 2.3 is a true difference. The above findings support the research hypothesis. So the researcher accepted the research hypothesis

Summarizes that the mean post test depression score 8.7 of the experimental group was lesser than mean post test depression score 10.7 of the control group. The obtained 't' value 10.1 was statistically significant at 0.001 level.

The reason which the researcher believes to have contributed to the effectiveness of aroma therapy are elaborated below with the verbatim of the old age against the main purpose of aroma therapy.

The third objective of the study was to associate the post level of depression with the selected demographic variables of old age in the experimental group

There was no statistical significance between the age and level of depression. The mean post test depression score for mild (50-55 years) is 30% moderate 10% and for mild (56-60 years) in 20% , moderate 6.7% mild 61-65 Years 6.7%. moderate 3.3% The mean post test depression score of Hindu was 50% and for Christian 13.3%. The mean post test depression score of participants of urban 36.7% and rural 26.7%. . The mean post test depression score of participants of in both the groups (100%) and (100%) independent in performance of activities of daily living. The mean post test depression score of participants of forced by children was 20% and for voluntary 43.3%. The mean post test depression score of samples illiterate 16.7%, primary 6.7% and secondary 10% higher education 13.3%, and graduate 16.7%

SUMMARY AND CONCLUSION

CONCLUSIÓN



SUMMARY AND CONCLUSION

RECOMMENDATIONS AND CONCLUSION

This chapter deals with the summary, conclusions, nursing implications, recommendations and limitations of the study.

SUMMARY

The purpose of the study was “A study to assess the effectiveness of aroma therapy on depression among old age people at selected old age home Dindigul”.

OBJECTIVES OF THE STUDY

- To determine the pre-test and post test level of depression among old age people the experimental and control group, at selected old age home
- To determine the effectiveness of aroma therapy on depression among old age people in experimental group.
- To associate the post level of depression with the selected demographic variables of old age in the experimental and control group.

The research hypothesis is selected for the study is (1) the mean post test depression score of the old age will be significantly lesser than the mean pre-test depression score of the old age who will have aroma.

Review of literature was done which enable the investigator to study in depth of the selected problem statement, to develop conceptual framework to construct the tool and analysis of data and for interpretation.

The conceptual frame work selected for this study is Widenbach's Helping Art of Clinical Nursing Theory (1964).

The study design was Quasi experimental design conducted among old age in selected old age homes, Dindigul. The tool consisting of demographic variables, Geriatric depression Scale to assess the depression level before and after intervention i.e. aroma therapy among old age. Experts validated the tool.

The pilot study was done in selected old age home, Dindigul. Six samples [three for experimental group, three for control group] that fulfilled the inclusion criteria were chosen the main population by using purposive sampling technique. The reliability was established by using Test Re Test method.

The study was found to be feasible to proceed with the main study. The pilot study was conducted after getting formal permission and ethical clearance.

The main study was conducted at old age home, Dindigul. The samples were selected on the basis of purposive sampling techniques. The data collected was analysed and interpreted based on their objectives using descriptive and inferential statistics.

MAJOR FINDINGS OF THE STUDY

There was statistical significance between the age and level of depression.

The findings of the study reveals that in experimental group majority (40%) of the samples were in the age group of 50-55 years in experimental group and control group (50%), (26.7%) of samples belonged to the age group of 56-60 years in experimental group and control group (23.3%) ,(23.3%) of samples belong to age group of 61-65years in experimental group and control group (10%), and (10%) of samples belong to age group of 66-70 years in experimental group and control group (16.7%). Regarding the sex status (73.3%) of males in experimental and(40%) in control group, and (26.7%) of females belong to experimental group (60%) in control group.. Regarding marital status about (43.3%) were in the married in experimental group and control group (40%).(13.3%) were in the unmarried in experimental group and control group (10%), (6.7%) were in the divorced in experimental group and control group (10%), (20%) were in the separated in experimental group and control group (23.3%), widow/widower criteria in experimental group (16.7)and (16.7%) were in the widow criteria in control group. In the experimental groups the patients was Hindu by religion (73.3%) in experimental group and control group(63.3%). Muslim by religion (6.7%) in control group. Christian by religion (26.7%) in experimental group and control group(30%). In the groups most of the patients were hailing from urban (56.7%) in experimental group and(66.7%) in control group. Rural (43.3%) in experimental group and (33.3%) in control group. Regarding support

system about (53.3%) were in family support in experimental group and control group (43.3%), (26.7%) were in relatives support in experimental group and control group (26.7%)%, (10%) were in friends support in experimental group and control group (20%), (10%) were in others support in experimental group and control group (10%), Regarding the duration of stay in the old age home below 1 years (16.7%) experimental group and control group (23.3%) , 1-2 years (10%) experimental group and control group (26.7%) , 2-3 years (6.7%) experimental group and control group (10%), 3-4 years (20%) experimental group and control group (10%) (46.7%) above 4 years experimental group and control group (30%) . Regarding performance of activities of daily living (86.7%) independent experimental and control group (73.3%) , (13.3%) partially independent in experimental and control group (26.7%). Recording the nature of admission to the old age home (66.7%) was in voluntary admission in experimental group (50%) in control group, (33.3%) forced by children's in experimental group (50%) in control group. Regarding educational status were illiterate (30%) experimental and control group (20%), primary (10%) experimental and control group (16.7%), secondary (16.7%) experimental and control group (20%). Higher secondary (20%) experimental and control group (30%). graduate (23.3%) experimental and control group (13.3%).

Summarizes that the mean post test depression score 8.7 of the experimental group was lesser than mean post test depression score 10.7 of the control group. The obtained 't' value 10.1 was statistically significant at 0.001 level. This indicates the mean difference of 0.4 is a true difference and has not occurred by chance.

There was significant association between the level of post depression score and demographic variables of the old age such as age, marital status.

NURSING IMPLICATIONS

Aroma therapy is a nurse initiated intervention that has the advantage of being therapeutic for old age. Aroma therapy has proven to be valuable intervention for reducing the depression of old age. This complementary therapy is safe which is alternative to drug therapy, therapy for mild to moderate level of depression. Complementary therapies are of particular importance for people who are unable to (or) uninterested in taking medications.

IMPLICATIONS FOR NURSING PRACTICE

- The study findings revealed the importance of nurses role in reducing depression among the old age using a cost effective, safe non pharmacological treatment that is aroma therapy.
- Study findings signify the importance of formation of guidelines in implementation of aroma therapy.
- Understand the importance of aroma therapy as an adjuvant to non-pharmacologic therapy
- Encourage the use of aroma therapy as a form of relaxation among people in various settings.

IMPLICATIONS FOR NURSING EDUCATION

- Current concepts and trends in holistic care of old age should be included in nursing curriculum.
- Nursing personal working in psychiatric ward should be given in service education regarding aroma therapy.
- Encourage the students to learn about the techniques of aroma therapy.
- Make the students to understand the benefits of aroma therapy in reducing the level of depression.

IMPLICATION FOR NURSING RESEARCH

- Disseminate the findings through conferences, seminars, publication in professional, national, international journals and the world web.
- As evident from the review of literature more research needs to be conducted on the effectiveness of certain aspects of aroma therapy like variation in duration, types, method of administration, using different audio visual aids, covering larger population, and in management of test depression.

IMPLICATION FOR NURSING ADMINISTRATION

- The administrators can encourage the nurses to use different safe, cost effective, psychotherapeutic intervention in reducing depression among old age.
- A considerate amount in the budget can be allocated for organizing the continuing nursing education programme.
- A staff nurse can be trained specially to administer aroma therapy.
- Provide opportunities for nurses to attend training programmed on aroma therapy.
- Initiate measures for introduction of aroma therapy in various settings.

LIMITATIONS

The limitation of the study was:

- Since the sample size was 60, the findings should be generalized with caution.
- The setting of the study was chosen due to the researcher's familiarity and it was not by random selection. Due to methodological limitation, the findings should be generalized only to the selected old age home.

RECOMMENDATIONS

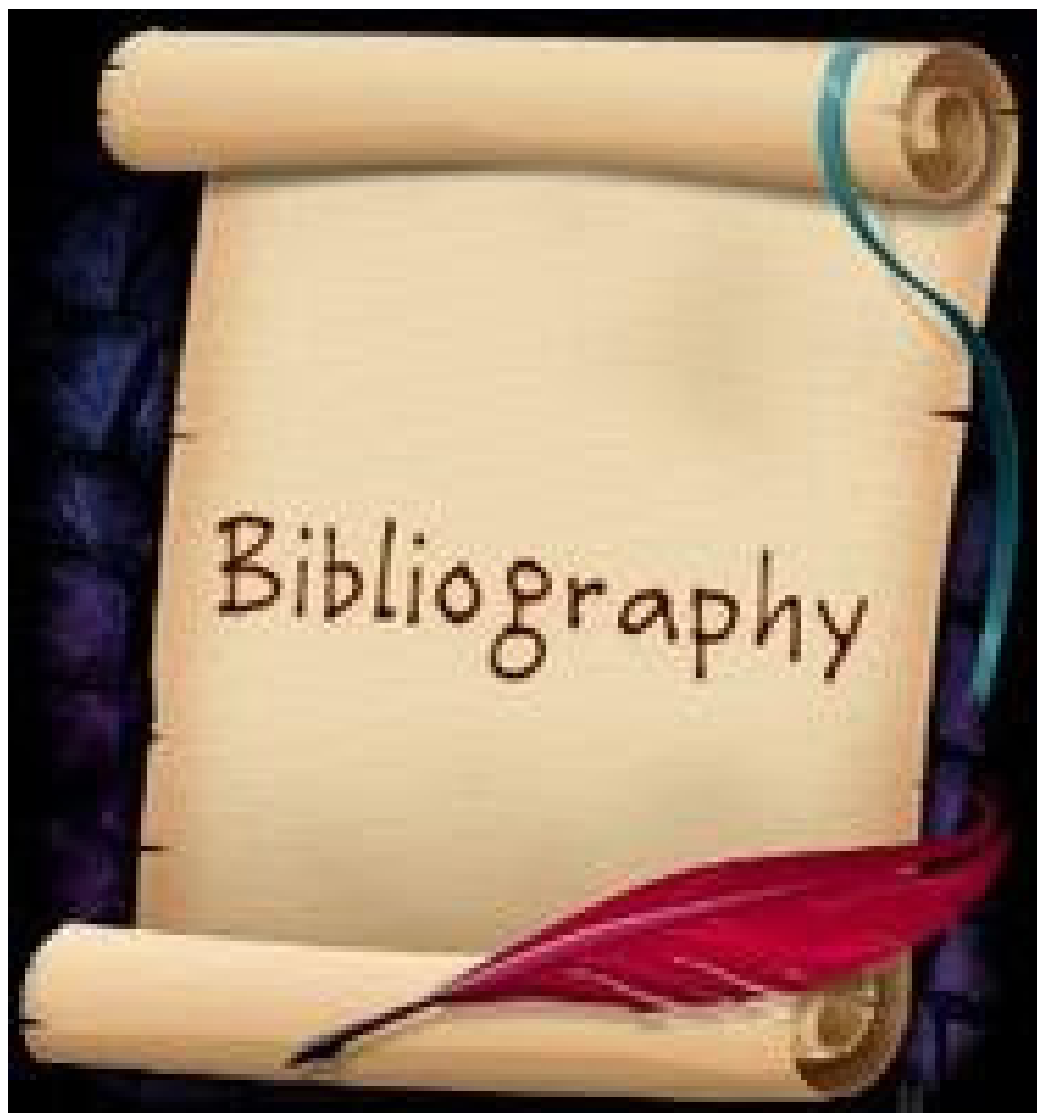
- The study can be conducted by using large populations to generalize the findings.
- A longitudinal study can be conducted to assess the effectiveness of aroma therapy in reducing the level of depression.
- This study can be done as a comparative study in different settings. Aroma therapy can be conducted with other population and with other variables.

SUGGESTION

- A longitudinal study can be undertaken to assess the effect of aroma therapy in various symptoms like stress, depression, insomnia and fatigue.
- This similar study can be replicated on large sample there by findings can be generalized to a large population.

CONCLUSION

The result showed that Most of the old age in old age home suffered from mild and moderate level of depression. Aroma therapy was effective in reducing the level of depression among the old age. Aroma therapy activities are able to improve psychological well being of people and improvement of their daily activities, reducing loneliness and in reduction of symptoms. The colors and aromas of flowers can reduce of depression.



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NETWORK SERVICES

- <http://www.pubmed.com>
- <http://www.google.com>
- <http://www.intelihealth.com>
- <http://www.learnwell.org/relax.htm>
- <http://www.scrib.com>

APPENDIX



APPENDIX - A

LETTER SEEKING EXPERTS OPINION FOR CONTENT VALIDITY

From:

S.Arun Reni Shroffe
M.Sc Nursing II year,
Jainee college of Nursing,
Dindigul.

To:

Dr.Deen Westley, MBBS.,MD
Consultant Psychiatrist,
Govt Head Quarters Hospital,
Dindigul.

Respected Sir,

Sub: Requisition for content validity tool

I am doing M.Sc Nursing II year in Jainee College of Nursing, Dindigul under M.G.R Medical University, Gundy, Chennai. As a partial fulfilment of my M.Sc Nursing Degree Programme, I am conducting a research on **“A STUDY TO ASSESS THE EFFECTIVENESS OF AROMA THERAPY ON DEPRESSION AMONG OLD AGE PEOPLE, AT SELECTED OLD AGE HOME, DINDIGUL”**.

A tool has been developed for the research study. I am sending the above stated for your expert and valuable opinion. I will be thank full for your kind consideration. Kindly return in to the undersigned.

Thanking You

Yours Sincerely
(S.Arun Reni Shroffe)

APPENDIX –B
CERTIFICATE OF ANBALAYA OLD AGE HOME

From:

S.Arun Reni Shroffe,
M.Sc Nursing II year,
Jainee college of Nursing,
Dindigul.

To:

The Anbalaya Old age home,
Dindigul.
Through proper channel: Principal Jainee College of Nursing.

Respected sir,

This is bring to your kind information that as per our nursing Curriculum, nursing research and statistics I have to conduct an Project **“A STUDY TO ASSESS THE EFFECTIVENESS OF AROMA THERAPY ON DEPRESSION AMONG OLD AGE PEOPLE, AT SELECTED OLD AGE HOME, DINDIGUL”**.

I request to allow me to conduct my research in the old age home in your contact please do the needful.

Thank you

Principal

Yours Sincerely
(S.Arun Reni Shroffe)

APPENDIX - C
CONSENT FORM

I, hereby consent for the above said study knowing that all the information provided by me will be treated with utmost confidentiality by the investigators and this will be helpful to find the effectiveness of aroma therapy among old age.

Signature of the participant

Date

APPENDIX – D

PART I

DEMOGRAPHIC DATA

Instructions

The following items seek information about you. Kindly choose appropriate one. The data will be kept confidentially

1. Age

- a) 50-55 years
- b) 56-60 years
- c) 61- 65years
- d) 66- 70 years []

2. Sex

- a) Male
- b) Female []

3. Marital status

- a) Married
- b) Unmarried
- c) Divorced
- d) Separated
- e) Widow/widower []

4. Religion

- a) Hindu
- b) Muslim
- c) Christian []

5. Domicile

- a) Urban
- b) Rural []

6. Support system

- a) Family
- b) Relatives
- c) Friends
- d) Others []

7. Duration of stay in the old age home

- a) Less than one year
- b) 1-2 years
- c) 2-3 years
- d) 3-4 years
- e) Above 4 years []

8. Performance of activities of daily living

- a) Independent
- b) Partially Independent
- c) Use of assistive devices []

9. Nature of admission to the old age home

- a) Voluntary
- b) Forced by children []

10. Education

- a) Illiterate
- b) Primary education
- c) secondary
- d) higher secondary
- e) graduate []

PART II

மக்கள்தொகையியல்சிறப்பியல்புகள்

1. வயது

- a) 50- 55 ஆண்டுகள்
- b) 56- 60ஆண்டுகள்
- c) 61- 65 ஆண்டுகள்
- d) 66- 70 ஆண்டுகள்

[]

2. பாலினம்

- a) ஆண்
- b) பெண்

[]

3. திருமணம்பற்றியவிவரம்

- a) திருமணமானவர்
- b) திருமணமாகாதவர்
- c) விவாகரத்துபெற்றவர்
- d) பிரிந்துவாழ்பவர்
- e) விதவை

[]

4. மதம்

- a) இந்துமதம்
- b) இஸ்லாம்
- c) கிறிஸ்தவம்

[]

5. இருப்பிடம்

- a) நகர்ப்புறம்
- b) கிராமம்

[]

6. ஆதரவுஅமைப்பு

- a) குடும்ப
- b) உறவினர்
- c) நண்பர்கள்
- d) மற்றவை

[]

7. முதியோர்இல்லத்தில்தங்கும்காலஅளவு

- a) ஒருவருடத்திற்கும்குறைவான
- b) 1-2 ஆண்டுகள்
- c) 2-3 ஆண்டுகள்
- d) 3-4 ஆண்டுகள்
- e) குறைந்தபட்சம் 4 ஆண்டுகள்

[]

8.தினசரிவாழ்க்கைநடவடிக்கைகள்

- a) சுயமாக
- b) பகுதியளவுசுயமாக
- c) துணைசாதனங்கள்பயன்படுத்தி

[]

9. முதியோர்இல்லத்தில்அனுமதிஇயல்பு

- a) தன்னிச்சைல்லாத
- b) குழந்தைகள்கட்டாய

[]

10. தகுதி

- a) எழுதப்படிக்கதெரியாதவர்
- b) முதன்மைகல்வி
- c) இரண்டாம்நிலைகல்வி
- d) மேல்நிலைகல்வி
- e) பல்கலைகழகபட்டம்பெற்றவர்

[]

APPENDIX - E

GERIATRIC DEPRESSION SCALE (LONG FORM)

Patient's Name: _____

Date: _____

Instructions: Choose the best answer for how you felt over the past week.

No	Question	Answer	Score
1	Are you basically satisfied with your life?	YES / NO(1)	
2	Have you dropped many of your activities and interests?	YES / NO	
3	Do you feel that your life is empty?	YES / NO	
4	Do you often get bored?	YES / NO	
5	Are you hopeful about the future?	YES / NO(1)	
6	Are you bothered by thoughts you can't get out of your head?	YES / NO	
7	Are you in good spirits most of the time?	YES / NO(1)	
8	Are you afraid that something bad is going to happen to you?	YES / NO	
9	Do you feel happy most of the time?	YES / NO(1)	
10	Do you often feel helpless?	YES / NO	
11	Do you often get restless and fidgety?	YES / NO	
12	Do you prefer to stay at home, rather than going out and doing new things?	YES / NO	
13	Do you frequently worry about the future?	YES / NO	
14	Do you feel you have more problems with memory than most?	YES / NO	
15	Do you think it is wonderful to be alive now?	YES / NO(1)	
16	Do you often feel downhearted and blue?	YES / NO	
17	Do you feel pretty worthless the way you are now?		
18	Do you worry a lot about the past?	YES / NO	

19	Do you find life very exciting?	YES / NO(1)	
20	Is it hard for you to get started on new projects?	YES / NO	
21	Do you feel full of energy?	YES / NO(1)	
22	Do you feel that your situation is hopeless?	YES / NO	
23	Do you think that most people are better off than you are?	YES / NO	
24	Do you frequently get upset over little things?	YES / NO	
25	Do you frequently feel like crying?	YES / NO	
26	Do you have trouble concentrating?	YES / NO	
27	Do you enjoy getting up in the morning?	YES / NO(1)	
28	Do you prefer to avoid social gatherings?	YES / NO	
29	Is it easy for you to make decisions?	YES / NO(1)	
30	Is your mind as clear as it used to be?	YES / NO(1)	

SCORE INTERPERATION

The total score obtained was interpreted as follows:

- 0-9 indicates mild depression
- 10- 19 indicates moderate depression
- 20-30 indicates severe depression

APPENDIX – F

PROTOCOL FOR AROMA THERAPY MASSAGE

HEAD TO SHOULDER MASSAGE

- Provide privacy.
- Provide comfortable position.
- Mix five drops of lavender oil with 10ml of gingerly oil in a cup.

HEAD SEQUENCE

STEP 1: With hands on either side of the clients head, Hold the head lightly until your breathing synchronizes.

STEP 2: Stroke lightly all over the clients hair with the palms of your hand .Then comb through the hair loosely with your fingers apart and relaxed, Seperating the hair but not touching the scalp. These soothing movements are used throughout the treatment to keep a smooth flowing rhythm as you change from one technique to another.

STEP 3: Support the forehead with one hand ,and use two fingers of the other hand to make rotations from the hair line back along the midline at one finger width intervals. work over the top of the head and down to the base of the skull. Here press upward with both fingers for a count of three. Return to the hairline and work a parallel line two finger widths from the first line ,finish by passing upward at the base of the skull for a count of three. Continue until you have covered one side of the head. Stroke the hair for a few seconds, then change hands and repeat on the other side of the head.

STEP 4: Starting at the base of skull, stroke and comb up through the hair toward the hairline, working over the scalp in the opposite direction to the rotation s in step three.

STEP 5: Hold your fingers with your nails in line at lightly scratch all over the head, keeping your wrist loose. Stroke or comb through the hair for a few moments.

STEP 6: Support the head with one hand, and use one finger of the other hand to apply pressure for 3-5 seconds at one finger width intervals along the midline. Start at the hairline and work back over the head to the nape of the neck, or work in the opposite direction if you prefer. Then work over one side of the head in the same

way, in parallel lines two finger widths apart. Stroke the hair lightly and change hands to work on the other side of the head.

STEP 7: Using both hands at the same time and keeping to a regular rhythm, tap all over the head. Keep your wrists loose and bounce of the scalp. This can be done lightly or vigorously, as the client prefers. Comb your fingers gently through the hair to remove any knots.

STEP 8: Starting with your hands on either side of the neck, slide them up into the hair, finger apart, and keeping close to the scalp. When you have gathered a handful of hair, close your fingers firmly and pull away from the head. Allow the hair to move through your fingers under tension, creating a strong, even pull. Repeat all over the head, always pulling the hair at right angles away from the scalp. Stroke or comb through the hair, from the nape of the neck to the hairline.

STEP 9: Support the forehead with one hand. Make a first with the other and knuckle up the neck and back of the head in a vertical line. Then work a parallel line, two finger widths from the first, over the side of the head. Stroke all over the hair, then change hands and repeat on the other side.

STEP 10: Support the forehead with one hand. With the heel of the other hand, knead with strong pressure up the back of the neck and head to the crown. Then start at the neck again, this time kneading up over the side of the head. Stroke the hair as you change hands and knead up the neck and over the other side of the head. Then knead the top, from crown to forehead. Rub all over the head briskly, then gently comb or stroke the hair.

THROAT SEQUENCE

STEP 1: Rest your hands gently at the base of the throat for a moment or two. Now use your fingers to stroke up the throat and round under the ears, using alternate hands with brisk, light movements for about 30 seconds.

STEP 2: Working with both hands together, make two finger rotations gently up the throat, either side of the midline. Repeat on parallel lines two finger width from the first. Then start under the chin and use four fingers to rotate firmly along the jaw bone to the ears, moving two finger widths between rotations.

FACE SEQUENCE

STEP 1:With light ,brisk finger movements, stroke up the side of your clients face from the jaw to the temples. Now work across the forehead with four finger rotations. Start in the middle with your fingertips in a vertical line and work outward with both hands, moving two finger widths between position and rotating for 3-5 seconds on each point.

STEP 2:Starting in the middle of the chin, work along the jaw bone with one finger rotations, and one finger width apart. Repeat in parallel lines at two finger width intervals up over the cheeks, finishing on the cheek bones. Now return to the middle of the chin and use firm two finger pressure under the chin for 3-5 seconds. Repeat along the jawbone, moving two finger widths each time.

STEP 3: Use one or two fingers to knead along the lower gums, moving outward back from the middle. Knead for 3-5 seconds in each position before moving two finger widths to the next. The repeat along the upper gums. The technique stimulate blood flow to the gums and encourages healthy teeth.

STEP 4:Hook all four fingers gently under the cheek bones and hold this position for 3-5 seconds. Then do the same under the eyebrows.

STEP 5:Now apply firm pressure into the skull with all four fingers on the forehead ,just above the eye brows. These techniques help sinus conditions and can lift heavy headaches.

EAR SEQUENCE

STEP 1:Starting at the top of the ears where they meet the head, and pinching between index finger and thumb, rotate all around the outer edge. When you reach the lobes, pinch them firmly and pull them down toward the shoulders for 3-5 seconds.

STEP 2: Rub the year briskly then cup your hands over them for 3-5 seconds. They will probably be quite hot and your client may hear a ringing or buzzing sound, which should fade after a few moments.

APPENDIX - G

PHOTOGRAPHY

